Exhibit 15

CONFIDENTIAL

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

Case No: 2:07CV6039

DARLERY FRANCO, individually and On Behalf of All Others Similarly Situated,

Plaintiffs,

-against-

CONNECTICUT GENERAL LIFE INSURANCE CO., CIGNA CORPORATION, and CIGNA HEALTH CORPORATION,

Defendants.

- - - - - - - - - - - - - - - - - - - -

DATE: May 17, 2010

TIME: 9:15 a.m.

CONFIDENTIAL

Videotape deposition of STEPHEN FOREMAN, taken by and before JOYCE SILVER, a Certified Shorthand Reporter and Notary Public of the State of New York, held at the office of WHATLEY, DRAKE & KALLAS, LLC, 1540 Broadway Avenue, New York, New York.

Job No. NJ258465

STEPHEN FOREMAN

Q. What are you hoping to -- what is your hypothesis for reviewing the algorithm? What are you hoping to prove?

A. If you can restate the answer in terms of -- without the word "hope."

Q. What do you intend to prove by conducting this analysis?

A. The question is if the allowed amounts that make their way through here are truly are representative of the 80th percentile or the 75th percentile of billed charges, and if the processing algorithms that Ingenix uses are not a problem, the known hypothesis would be that -- as stated by defendants' reports, then it would seem that allowed and billed charges would inflate at roughly the same rate; and that over a period of time, if those algorithms -- I mean, this is just a processing side of the algorithms, if that works for the people -- for those claims in the top 20th percentile, I'm going to use the 80th as an example, the hypothesis -- the hypothesis would be that average allowed would go up to the similar rates to the average billed. So I -- it first -- this is just a first level, macro level view of this.

In addition, it would be possible to look at the proportion of claims that appear in the top tier for which billed are greater than allowed. You would expect to see -- if these are really truly representative of the 80th percentile, you would expect to see consistently 20 percent of billed less allowed claims in that upper 20th percentile. So that would be a first-level, high-level look at what's happening here with the data.

In addition, in terms of the high low screen, it would be possible to take a look at the claims that the high low screen screened out of the data, and you could go there and look at the high end charges that are screened out and evaluate them in terms of A, whether they really were outliers on the basis that Ingenix's view of this is that it's appropriate to screen out outliers. And as a corollary to that, you could and it would be appropriate to look at when these values are being screened out what happens to the 80th percentile. Does it move up? Does it move down? Where does it move to?

Q. To date, have you completed or do you have an opinion concerning the analysis that you just

described?

A. I've done a preliminary analysis. I'd want to do some more work to be more certain about it. I think the preliminary analysis that I've done has been -- been produced. I think that data, you know, speaks for itself. What it does tend to indicate is that for the Aetna data, the increase in billed charges is greater for a period of years than the increase in the allowed, and then for one year it reverses.

For the CIGNA data, for some years billed, the increase in the billed is similar to the increased in the allowed, but on an overall basis, between 2000 and 2008, billed's increased at double the rate of allowed.

MR. MORETTINI: Can you mark this for me, please?

Outside -- Counsel, outside of this, which I was provided this morning, I don't have other copies, so...

MS. KALLAS: We distributed them around.

MR. MORETTINI: So everyone has a copy.

(Off-the-record discussion.)

(Foreman-5, Document entitled, "AA" 18

CONFIDENTIAL

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DARLERY FRANCO, individually and On Behalf of All Others Similarly Situated,

Plaintiffs,

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CONNECTICUT GENERAL LIFE INSURANCE CO., CIGNA CORPORATION, and CIGNA HEALTH CORPORATION,

Defendants.

- - - - - - - - - - - - - - - - - - - -

DATE: May 18, 2010

TIME: 8:35 a.m.

VOLUME II

Videotape deposition of STEPHEN FOREMAN, taken by and before JOYCE SILVER, a Certified Shorthand Reporter and Notary Public of the State of New York, held at the office of WHATLEY, DRAKE & KALLAS, LLC, 1540 Broadway Avenue, New York, New York.

Job No. NJ258467

Foreman - direct

rate in any other CPT/geozip combination is higher, lower or the same as the allowed amounts in that location. Correct?

A. That's correct. We've done only this illustration (indicating).

Q. And you would have to actually do the analysis comparing the allowed amounts to the but for UCR rate in each CPT/geozip combination to find out whether the but for rate is higher or lower than the allowed amount. Correct?

A. I'm saying if we went through, used the model, used the data, used the Aetna data for example, to develop but for rates, we could use that to develop but for rates; but in terms of a comparison of how they relate to Ingenix, that really -- you wouldn't need to have that relevant to anything because all you need to do at that point is to produce the damage that would flow from that. Now --

Q. Go ahead, I'm sorry.

A. The math would produce what it produces. And, again, to go run the data to produce the percentiles, at that point the result will provide what it provides. I mean is it -- anything is

Foreman - direct

possible, as I said yesterday. So I mean I wouldn't want to assume or speculate.

Q. Well, this illustration, Exhibit B, calculates damages based on the difference between the should allow amount which is the but for UCR rate and the allowed amount. Correct?

A. That's correct.

Q. And this illustration is limited to geozip 760 and CPT 99213. Correct?

A. That's correct.

Q. And if you were to run this same analysis on another CPT/geozip combination, you have no idea whether the but for UCR rate would be higher, lower or the same as the allowed amount in that other CPT/geozip combination without actually doing the analysis. Correct?

MS. KALLAS: Objection, asked and answered many times. You can answer.

A. That's correct.

Q. Dr. Foreman, you're not offering an opinion in this case that the percentile values in Ingenix were lower than the accurate percentiles in each and every instance. Are you?

MS. KALLAS: Objection.

Foreman - direct

A. Are you asking that in the context of a legal opinion or a statistical opinion?

Q. Any opinion at all. Are you offering an opinion that the percentile values for Ingenix were lower than the accurate percentiles in each and every case?

MS. KALLAS: Same objection.

A. I'm offering no opinion at all because in order -- the model provides for computation of an accurate -- I'll put that in quotes -- an accurate percentile value to be used in the UCR setting and that's not a matter of opinion. You know, it's a percentile -- it's a non-parametric percentile value that is generated by the methodology.

Q. Dr. Foreman, do you believe that charged data distributions are non-parametric in each and every instance?

A. In the sense that we're looking at percentiles and using real percentiles -- you know using percentiles, that's the context I'm using that in. For derived values, that's a different process that produces derived values, but I'm not speaking about derived values here.

When I use the term "non-parametric" I'm

Foreman - direct

using the idea of percentiles that are actually developed from a distribution of data.

Q. And recognizing that this discussion is limited to distributions of actual charge data, is it your view that all distributions of charge data are non-parametric?

A. They're distributions. I mean in that sense that they're not based on model building. They are based on an actual distribution.

Q. And you're of the view that all distributions of charged data are non-parametric?

A. All distributions of charged data are distributions of charged data. I'm using that term "non-parametric" in that sense as opposed to a model-based approach.

Q. You would have to look at the distribution for each CPT/geozip combination in order to know whether the charged distribution for those CPT/geozip combinations is non-parametric. Correct?

A. The non-parametric term, as I'm using it here, pertains to percentile values, use of percentile values as opposed to modeling which would be parametric.

Q. And as used referring to percentile

Foreman - direct

believe relates to your question and there the conclusion is there's a way to build a fee schedule that meets the requirements of the statute and addresses the public policy goals of what a sound physician fee schedule should provide. And to keep it in context, I think those public policy goals are back here on page seven.

"Such an approach would use existing arbitration award decisions as the basis for this fee schedule. Since these award decisions implement the statutory standards of 75th percentile of reasonable and prevailing fees, the fee schedule would comport with statutory requirements," all typos included.

MS. KALLAS: Doctor, I'm sorry, I just want to make sure this record is clear. When you were referring to paragraphs early on in your response, were you referring to paragraphs that appeared in the conclusion section that started on the bottom of page 10 through 11?

THE WITNESS: That's correct. And when I was referring to the bulleted items, the goals of an appropriate fee schedule, I was referring to the bulleted -- black bulleted paragraphs on page seven.

Q. And continuing on to the last paragraph

Foreman - direct

of the conclusions --

A. Yes.

Q. -- do you see that the first sentence says, "For those instances where there is not an arbitration award to provide the basis for a fee, an appropriate fee schedule could use physician fee reference, PFR, at the zip code level to construct the schedule to supply the missing fees"? Do you see that?

A. I do see that.

Q. And that was your opinion when you wrote this report?

A. That was my conclusion.

Q. That was your conclusion when you wrote this report?

A. That's correct.

Q. And I'd just like to ask you about a statement on page six of the report about PFR. Do you see the statement at the top of the page that says, "The data that come closest and is recognized by coding experts as the nearest available accessible substitute for usual, customary and reasonable fee comparisons is the Physicians Fee Reference, PFR, provided by Wasserman Medical Publishers, Limited.

Foreman - direct

Built on annual physician fee surveys, the PFR provides physician fees using CPT codes and ICD nine codes at the 50th, 75th and 90th percentiles for each in the United States."

Do you see that?

A. I do see that.

Q. Do you agree with that statement, sitting here today?

A. I do not.

Q. What about this statement do you disagree with?

A. The -- at the time that we did this work -- or I did this work, in conjunction with Medical Society of New Jersey and others, it was my understanding that the basis for the PFR was physician survey data. I later came to discuss this and learn more about it, specifically in connection with the New York project.

Based on my experience with PFR, I believe I raised the question whether or not we wanted to look at or use PFR in connection with the New York Attorney General's work. The staff at the New York Attorney General discussed with me their interviews with, I think, Dr. Wasserman and some

others, maybe not others, maybe just Dr. Wasserman, regarding PFR; and they had come to the conclusion that some of the PFR was built on survey data, but other substantial portions of it were in fact built using other sources including, in a number of instances, Medicare, Medicare fee schedules. So the New York Attorney General determined not to use the PFR as part of its review of the Ingenix database.

Q. And is there any other basis for your statement, sitting here today, that you disagree with your earlier statement about Wasserman, other than the New York Attorney General investigation?

A. If your question pertains to at the time was this the best available information we could find to structure the supplement to the arbitration decisions, it would be my memory, recollection and belief that at the time we certainly couldn't find anything better. You know, as I sit here today -- also, I mean, you know, we were dealing with, you know, a fee schedule that had been coupled together with, you know, probably Medicare, fee for service multiples.

You know, in the New York Attorney General case, I think the next logical question was,

Exhibit 16

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY
MDL NO. 2020
MASTER FILE NO. 2-07-CV-3541

IN RE: AETNA UCR LITIGATION

Volume I
TRANSCRIPT OF
DEPOSITION OF STEPHEN FOREMAN

TRANSCRIPT of the stenographic notes of the proceedings in the above-entitled matter, as taken by and before TAB PREWETT, a Registered Professional Reporter, a Certified Shorthand Reporter, a Certified LiveNote Reporter, and Notary Public, held at the offices of WHATLEY DRAKE & KALLAS, LLC, 1540 Broadway, New York, New York, on Monday, November 1, 2010, commencing at 8:41 a.m.

course. If I had reason to believe there might be problems, I might.

Q And you had no reason to believe that here?

A Not from what I could see, because, for example, with the 300 CPT study, I did my own similar study. With regard to some of the CIGNA damages, I independently did another study on the damages to see how it related to what Mr. Cohen had done.

With respect to Aetna medical and dental, I did my own runs of Aetna medical and dental damages to satisfy myself that what he had found was reasonable.

So rather than critique his own computer programming, or anybody's, you said -- you used the word "normally" in your question -- I would actually go do the study myself, independently. That way you are not predisposed into making some of the same errors in approaching things some of the same ways. An independent replication

I think is superior to trying to re-duplicate.

Q When you are referring to your own study, you are referring to the 350 CPT study?

A In part. Since that time, I have done another study of all 420, 421 zips in Ingenix contributor data for 2006, 2007, and 2008, to try to do a third replication of that, because it's very important.

Q Are you relying on that third replication in your expert report in the Aetna case?

A No, I am not.

Q So, Dr. Foreman, are you testifying that, instead of reviewing Mr. Cohen's programming and underlying work product, you instead conducted your own study of the 350 CPT study to get comfortable with his work?

MS. KALLAS: Objection as to form.

A That's correct -- more than

comfortable. Let me expand on that just a, you know, a bit.

You know, I considered that to be a verification and replication, so, you know, probably a little bit stronger than comfortable.

Q Okay. Well, rather than review Mr. Cohen's programming and underlying work product, you conducted the 350 CPT study to verify his work?

A Yes, I did.

Q Dr. Foreman, if you could turn with me, please, to Exhibit 21, which is the Aetna merits expert report, Exhibit B to that report, which is page 136, do you see that Exhibit B is entitled "Materials Reviewed"?

A I do.

Q Does Exhibit B list all of the materials you reviewed in preparing your expert report in the Aetna case?

A Exhibit B lists the materials that I reviewed that I relied on in those terms, materials that I cite in here,

materials, you know, that directly contributed to this.

So to the extent that they are listed here, I used them in the report itself. You know, I am sure that I reviewed a number of other materials that I have not included here. They didn't make their way into the report.

Q Okay. So Exhibit B reflects all of the materials that you have reviewed and relied on in preparing your merits expert report?

A Yes, they do. If I were doing this for a paper, I would say "Sources Cited" or something. Maybe I did that, too.

Yeah.

Q Page 123 says "Works Cited," correct?

A Correct.

Q So and Exhibit B --

A These are academic works cited. Exhibit B is factual background material used. So, yeah, I'd put them together if

about what I asked counsel for, or I didn't ask counsel for, or any discussions that I had with counsel. Other than that, I didn't go outside of that context.

Q Okay. Dr. Foreman, are you relying on any documents, files, or work you performed in connection with the New York Attorney General's investigation?

A No, I'm not.

Q And are you relying on any documents filed or work you performed in connection with the FAIR Health project?

A No, I'm not.

Q Dr. Foreman, you have been handed a copy of a document marked Exhibit 25. Do you recognize this document?

(Exhibit No. Foreman 25, Aetna Production Road Map, is marked by the reporter for identification.)

A I do.

Q What is this document?

A I believe I -- this is a spreadsheet from an Excel that I called

Dr. Stephen Foreman

"Production Road Map."

Q Did you prepare this document?

A I did.

Q Why don't we refer to this as the "Aetna road map." Okay?

A Fair enough.

Q Does the Aetna road map reflect all data files generated in connection with the tables reflected in the Aetna merits expert report?

A Could you clarify what you mean by all data files? I mean, to the extent there were some instances where there were intermediate data files that were produced that were just too big to save and at the time I didn't save them, I didn't know I was to save them -- so they are not included in here.

There are some of those.

We did produce some massive data files that we used, you know, from the extractions to the extent that I had them.

But it was a good faith attempt to produce everything that, you know, went

Dr. Stephen Foreman

into the work flow producing of it, to the charts and the graphs and the tables in the report.

Q Objection. So apart from materials that no longer exist, does the Aetna road map reflect all files generated in connection with the tables listed in the Aetna merits expert report?

A They reflect not only the files that were generated, again, with the caveat that things that don't exist -- but everything that I could find we produced. These are hundreds if not thousands of files generated over, you know, a number of weeks of work, you know, 15 hours a day.

So, you know, can I say here with certainty that we found them all? No. Did we locate everything we could find? You know, with some effort, yes.

And these also describe the files used in terms of the work flow process, so it's not just the files themselves, you know, but some basic description of pieces that went into an

Dr. Stephen Foreman

contract.

And those things I'm not opining to.

Q Okay. So you are not opining on whether percentiles can be used or what percentiles can be used when a contract does not specify a particular percentile, correct?

A That's correct.

Q Dr. Foreman, in your opinion, the Ingenix database has a downward bias, correct?

A That's correct. In fact, in my opinion, it has more than one downward bias.

Q Can you explain what you mean by that?

A Yes.

In my opinion, there's a quantitatively identifiable downward bias when one looks at the contributor data compared to the Ingenix product; and from quantitative work, that downward bias would include failure to correct for time,

Dr. Stephen Foreman

because the -- if you look at the Ingenix contributor data, you will see billed charge inflation over time.

It's not reflected in the products themselves. Also, some of the illustrations showed that truncation or elimination of data would provide downwards bias.

Q So let me just interject. If you are going to summarize all the different critiques you have of the Ingenix database, we can see those in the report. I don't want to waste anyone's time. Let me ask a better question.

MS. KALLAS: Please don't interrupt the witness when he's answering a question. Do you want an answer to your last question?

MR. SIGLER: I am going to withdraw my question.

MS. KALLAS: Okay. You then withdraw it, and then strike the response to that.

Q Dr. Foreman, when you say the

Ingenix database has a downward bias or multiple sources of downward bias, are you saying that each and every percentile value in the Ingenix database is lower than it would have been but for those sources of bias?

A Two parts to that question. The first piece is -- it is the "downward bias"; and the second piece is "in each and every instance."

And the way the first part of the question was stated, actually -- seriously, I am not saying it's got a downward bias. Basically, the quantitative studies here show a downward bias. So I really believe the data should speak rather than me on that issue.

Q Okay.

MS. KALLAS: Wait. Please don't interrupt the witness.

Finish your response, Dr. Foreman.

A Now, as to the second part, the studies, the results that are shown in here

and the report, both with the 300 CPT study and with my 350 CPT study -- and I have done some other work since in connection with some work that Dr. Slottje did, there are -- there are roughly -- depending on which of these studies, there are roughly 60 -- from my work, 60 percent, 70 percent of the time there is downward bias for the same CPT geo zip combination.

And about 20 percent of the time -- I use that just for summary, for discussing -- they are the same. And in 15 to 20 percent of the time, depending on the study, less for dental, the product -- Ingenix product percentiles are higher.

Q And when you use --

A Is that responsive to your question?

Q Actually, I don't think so, but let me try again.

A Okay.

Q When you use the words "downward bias," when you say -- strike that.

Dr. Stephen Foreman

When you say that the Ingenix database has a downward bias, are you saying that, on average, the percentile values in the Ingenix database are lower than they would have been, but for the techniques that you are criticizing?

A With some qualification on the word "average," in the overall -- and we came to the conclusion on the overall that -- conservative -- the medical/surgical percentiles overall are about 11.2 percent lower than the product -- than they are in the contributor data.

And for dental they are about 9.8 percent lower on the overall.

And that's based on using percentiles and averages, yes.

Q Dr. Foreman, if you could turn with me, please, to page eight of your report, paragraph 17, do you see that?

And my question is going to relate to the fourth bullet point under paragraph 17, which is actually at the top

Dr. Stephen Foreman

CIGNA's data contribution practices?

A No, I have not.

Q Have you performed any data analysis regarding Aetna's profiling guidelines?

A Not data analysis, no.

Q And do you have a damages model that addresses Aetna's profiling guidelines in any way?

A No, I do not.

Q Dr. Foreman, turn with me, please, to page 73 of your report in the Aetna case.

Do you see that section seven of your report begins on page 73, and it's titled, "Accurate Percentiles and Bias in the PHCS Data"?

A I do.

Q And this section of your report, section seven, describes your 300 CPT study and 350 CPT study, correct?

A That's correct.

Q In those studies, alternative percentile values were generated using

Dr. Stephen Foreman

Ingenix contributor data, correct?

A That's correct.

Q And in the 300 CPT study, Frank Cohen generated those alternative percentile values?

A That's correct.

Q And in the 350 CPT study, you generated the alternative percentile values?

A That's correct.

Q And in both the 300 and the 350 CPT studies, the alternative percentile values were compared to Ingenix PHCS percentile values, correct?

A That's correct.

Q Were the percentile values that were generated by Frank Cohen from the contributor data in the 300 CPT study accurate percentile values?

MS. KALLAS: Objection as to form.

MR. SIGLER: What's the form objection?

MS. KALLAS: "Accurate."

Dr. Stephen Foreman

Q Do you understand what I mean by "accurate"?

A I believe I do.

Q Can we have the question read back.

(Reporter read back pending question.)

A The use of the word "accurate" is a label. It's not meant as a scientific term in this context. The CPT percentiles generated by Mr. Cohen and also by myself from the contributor data would be more accurate in that that data would not have been subject to several processes, including the high/low screen. So perfectly accurate, no; more accurate, yes.

Q Okay. So the percentile values developed from the contributor data by you and Mr. Cohen are not perfectly accurate percentile values, correct?

A That's correct.

Q Okay.

A "Alternate" or "adjusted" might be a less value-laden term.

current time, sufficient data reports, values without derivations, yes.

Q So there are five questionable techniques that you list in that sentence; correct?

A Yes.

Q Are these the five techniques that you corrected for in the 300 and 350 CPT studies?

A The use of the word "corrected" probably is not quite descriptive of what we did. We did our study without engaging in these procedures; so we didn't do the procedure and make a correction for them. So we did not do the -- you know, we avoided doing these processes.

Q Fair enough.

So the percentile values that you and Mr. Cohen generated were generated without using these five techniques, correct?

A Correct.

Q And these are the only -- are these the -- strike that.

Are these the only five techniques that you were exploring the impact of in the 300 and 350 CPT studies?

A First of all, the 300 and 350 CPT studies don't specifically explore the impact of this, for a reason. There is an Ingenix document that describes a number of other scrubs, processes, other things that they are doing, including, I think, elimination of data when things like patient age is included. So it isn't included.

So there may be a lot of other things going on in the Ingenix product production that are almost impossible to reverse engineer or correct for or to look at.

And that's why what we did was to calculate a percentile based on the data that we had contributed to us without engaging in these kinds of processes or others that we might not even know about.

Q With respect to the other practices that you don't know about, have

Dr. Stephen Foreman

you performed any analysis or investigation to try to understand those practices?

A No, they come out of a document that is about 600 pages long. It would be extremely difficult. If you look at the number of interactions among those processes, it would be difficult to parse out, you know, what's doing what.

And, in fact, here, the combination of the high/low screen and the time factor with the billed inflation, charge inflation -- that combination in and of itself produces something different than either of them separately.

So that's why, you know, our basic approach was to take the contributor data, do a percent -- simply do a percentile on it, you know, as pristine and clean as you can make it, and compare it to the Ingenix product, which has, you know, all kinds of things built into it.

Q And with respect to the processing techniques that Ingenix used that you have not investigated, are you

Dr. Stephen Foreman

offering any opinion as to whether those techniques are appropriate?

MS. KALLAS: Objection as to form.

A In the four corners of the 300 and the 350 CPT studies, we are comparing the contributor data percentiles, you know, without any processes, to the product percentile values that have processes. We find the difference overall; it's downward in terms of the specifics of those processes described in that processing manual. You know, I can recall having some opinions about them, but not that I am relying on for the report.

Q Are you offering an opinion in your report, Dr. Foreman, that these five questionable techniques listed in paragraph 278 should not have been used by Ingenix?

A Let's take them one by one, I think, and I describe these in the report.

But the high/low screen, for example, Ingenix eliminates 6, 7 percent of the data, and on the basis that they call

processing manual. So I'm not sure that the flaws that we have discussed are even encompassed in everything that's going on here.

It's very difficult to reverse engineer a process like Ingenix's. So -- I mean, so it would be difficult to parse out that 11.2 percent in terms of high/low screen or time value, the inflation issue. So we didn't attempt to parcel it out.

Q Dr. Foreman, I would like to talk about the 350 CPT study and, in connection with that, the chronology associated with the 300 CPT study as well.

Was the 300 CPT study completed before the 350 CPT study?

MS. KALLAS: Was completed? Started? I am talking about 350 started -- before it was started? Is that what you are asking? I don't --

Q Was the 300 CPT study completed before the 350 CPT study was completed?

A No, it was not. It is my recollection that the completions were

contemporaneous. Basically, given the press of time here, I asked Frank to run his, and I ran a separate one, basically, for purposes of comparing results, verifying. So they were being run at the same time.

Q When was the 300 CPT study completed?

A To the best of my recollection, August 8th.

Q When was the 350 CPT study completed?

A The same day.

Q And that's the day before you signed your expert report, correct?

A That's correct.

Q Did anyone double-check the calculations in the 300 CPT study?

A Other than to the extent that I took Mr. Cohen's work and built spreadsheets, no.

Q Did anyone double-check the calculations in the 350 CPT study?

A No.

Q When did you start the 350 CPT study?

A As we sit here, I can't remember. It was both studies, particularly, the 350, which I did -- I know we got contributor data. As soon as I could start extracting contributor data, I did.

So it was kind of an ongoing process from the time, you know, soon after we got the contributor data. So I just can't remember.

Q Within a week after you received the contributor data?

A It was started? I would say yes, because I went -- I went to do the data extractions to begin with. And a lot of -- you know, a lot of processes ongoing, for example, the representativeness runs that are in here, I think I did those pretty early on after the extractions. In terms of doing the percentile work, that probably occurred later.

It would be fair to say that

Dr. Stephen Foreman

Q Do you know whether Frank Cohen combined geo zips in the 300 CPT study?

A I don't -- I know of no reason why he would have. Again, I haven't checked his computer language on it. Given the level of the issue there, I would be extremely surprised. I doubt he did. I mean -- as we sit here, can I say I know he didn't? No. But I doubt it.

Q Dr. Foreman, let's turn back to your report, table 27, which is on page 94.

MS. KALLAS: Want to take a break? We have been going a while.

MR. SIGLER: Okay. Off the record. Let's take a break.

THE VIDEOGRAPHER: The time is 3:28 p.m., November 1, 2010. This completes tape number four in the videotaped deposition of Dr. Stephen Foreman.

(A break is taken.)

THE VIDEOGRAPHER: The time is 4:01 p.m., November 1, 2010. This is tape number five in the videotaped

deposition of Dr. Stephen Foreman.

Q Dr. Foreman, please turn with me to page 94 of your expert report. Do you see that the section at the top of page 94 is, "Verification of the 300 CPT study and the 350 CPT study"?

A I do.

Q And does this section describe the use of the 350 CPT study to verify the results of the 300 CPT study?

A This does.

Q And is it your conclusion that the 350 CPT study verifies the results of the 300 CPT study based on the analysis reflected in table 27?

A In terms of the paragraph 358, I use verification in the context of consistency. So if you look at table 27, you see very small differences. There are small percent differences between the two studies. Yes.

Q And the line of table 27 that says "Average Difference," are those dollar value differences?

Dr. Stephen Foreman

A That's correct.

Q So, for example, the percentile values in the 300 CPT study are on average $4.12 lower than the values in the 350 CPT studies for the 80th percentile?

A That's correct. The first sentence in paragraph 357, it's not consistently in particular order; but the 4.01 for the 75th percentile overall average is the lower end of that range, and the 564 is at the higher end. I didn't average them out.

So your question, if you did the averaging, I haven't done the averaging. If your question pertains to 4.12, an average of that, I don't know.

Q Okay. Can you describe to me how you performed the calculations that resulted in the numbers in table 27?

A In order to do that comparison, I merged the 300 CPT geo zip, CPT geo zip combinations that those studies -- percentile values with -- with mine using SPSS, and, basically, took the difference.

Dr. Stephen Foreman

So between the 300 CPT study, 80th percentile values equivalent in mine. It's my recollection it was done for all three years for which the comparisons were available in -- as in the paragraph 355, that that covered 34,225 combinations.

Q Did you do any weighting?

A No, I didn't on the basis that the weights should have been the same. In other words, it would have been the same number of accounts in the 300 CPT study as in the 350 CPT study since it was the same geo zip CPT combination. So whether you weighted or just did the average, you would come up with the same.

Q So you are lining up percentile values for the same CPT geo zip, correct?

A That's correct.

Q And each CPT geo zip comparison is given equal weight in this average difference in table 27?

A That's correct.

Q You said the comparisons were done for all years 2006 through 2008?

Dr. Stephen Foreman

A That's my recollection.

Q Are you sure that's what was done?

A I'm not positive as we sit here. I haven't reviewed it.

Q Okay. Are there any backup files or data sources that you could go to to find out whether that's the case?

A I believe this table is one of the spreadsheets that was lost. So I couldn't do that now. I can replicate the comparison in order to double-check that. But I think, if we go back to the Production Road Map under table 27, where you see "file lost," generating all of this, I can't find the file.

Q Was it deleted or destroyed?

A I don't know what happened to it. I can't find it.

Q When you did you realize it was lost?

A At the time I produced the Production Road Map.

Q Are you aware of any other data

Dr. Stephen Foreman

files or programs supporting the analyses in your report that have been lost, destroyed, or deleted?

A First of all, I'll go through the Production Road Map, and I will -- I don't recall any, you know, that I culled out in here. I don't see any others in here.

There were some intermediate data sets, I think, for CIGNA. I'm not sure, but I don't remember any in Aetna. Are you talking about CIGNA or Aetna or both?

Q Either one.

A I recall a merged -- not contributor -- a merged file for CIGNA claims. I don't think I saved that one during the production process. And I looked. I couldn't find. It would have been a big -- and I don't remember saving it. So other than that I can't remember any.

Q Dr. Foreman, in paragraph 357 of the report, immediately under table 27,

the last sentence of that paragraph, you say:

"Overall, there was virtually no difference between the percentile values for the two studies, less than 1 percent for all but the 95th percentile, particularly for the 80th percentile where the difference was 0.1 percent."

Do you see that?

A I do see that.

Q Is your conclusion that the 350 CPT study verifies the 300 CPT study based on the percentage difference reflected here in table 27?

A In part, it is, and particularly the bottom line on the comparisons, the roll-up comparisons of the percentiles, the same kind of comparison -- if you look at 300 CPT versus -- in the Ingenix product, you know, the contributor, in the contributor data file, the 300 CPT.

So contributor versus Ingenix product produces a substantially larger difference. Similarly, if you compare

before, I don't read SQL. I just don't know.

Q So can you tell us from this document how modifiers were handled in the extraction process?

MS. KALLAS: Objection as to form.

A I see on page three the exclusion -- modifier exclusions lines there. Like I said, I don't read SQL code; but that appears to me from this that modifiers were excluded in Mr. Cohen's damage claim extractions, which would tend to understate the damage claims that he provided.

Q Do you know why modifiers were excluded?

A No, I don't. I mean, it would be appropriate to recalculate including modifiers with an adjustment.

Q Dr. Foreman, did you review the class member claim lines before signing your expert report?

A I'm sorry. I don't understand

the question. Did I look at every damage claim line?

Q Did you review any class member claim lines before signing your expert report?

A On my own or as done by Mr. Cohen?

Q Either one.

A Yes, I did.

Q And when you reviewed the class member claim lines, were they from your own extraction or from Mr. Cohen's extraction or both?

A I reviewed the extractions that I did from the Aetna claims lines.

Q Did you review Mr. Cohen's extractions?

A No, I did not.

Q Have you reviewed them --

(There was a discussion off the record.)

Q Dr. Foreman, did you personally review the claim lines that Mr. Cohen extracted?

A No, I did not.

Q And did you personally review any other claim line extractions?

A Yes, I did.

Q And those were the claim lines that you personally extracted?

A That's correct.

Q And before today have you ever looked at the claim lines that Mr. Cohen extracted?

A I don't believe I have looked at any today. So, no.

Q At any point before today?

A No.

(Exhibit No. Foreman 32, Screen Print Document, is marked by the reporter for identification.)

Q Dr. Foreman, you have been handed a copy of the document marked Exhibit 32, which is a screen print. And you will see the name of the file at the top of the page.

Please take a minute to review the document.

Dr. Stephen Foreman

My first question is going to be whether you recognize it.

A I'm not sure I can say that I recognize the document as presented to me. I recognize the claim fields across the top. I do recollect the "rating system used" code, which is what I was referring to earlier, where the "HI" -- in fact, I believe that relates back to the HIAA era, pre-Ingenix.

So this is what we used to identify the damage claims that I talked about earlier, so the "HI" would be HIAA. In fact, some of these codes down there further -- you see an HIAA and then the two numbers there -- would be a percentile.

And at some point, I recall knowing what those last two letters are, but I can't remember anymore. So like the "AP," it is possible that this may be one -- you know, an excerpt from damage claims that I extracted because it's got a CSV suffix on it.

When I did my extractions, I

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY
CASE NO. 07-CV-6039(SRC)(PS)
DARLERY FRANCO, et al.,
Plaintiffs,
vs.
CONNECTICUT GENERAL LIFE INSURANCE CO.,
Defendants.

In Re:

AETNA UCR LITIGATION
MDL NO. 2020
Master File No.
2:07-cv-3541

VOLUME II VIDEOTAPED TRANSCRIPT OF DEPOSITION OF STEPHEN FOREMAN

TRANSCRIPT of the stenographic notes of the proceedings in the above-entitled matter, as taken by and before TAB PREWETT, a Certified Shorthand Reporter and a Notary Public, held at the offices of WHATLEY DRAKE & KALLAS, LLC, 1540 Broadway, New York, New York, on Tuesday, November 2, 2010, commencing at 8:33 a.m.

Dr. Stephen Foreman

Q Can you describe for me how the Ingenix high/low screen works?

A The high/low screen applies a multiplier to the high end of a range and to the low end of a range and truncates, excluding data in excess of the high end of the range, and removes, truncates data under the low end of the range.

Q Do you know what the multiplier that Ingenix applies to the high end of the range for medical/surgical data is?

A For purposes of some of the illustrations -- well, the first answer is I am not quite sure that I know that. I have seen some deposition testimony that gives some numbers, but I am not exactly sure what those number multipliers are.

Q And do you know what the multiplier Ingenix applies to the low end of the range for medical or surgical data is?

A I have seen some information on that; but I can't say as we sit here that I know exactly what the multiplier is,

Dr. Stephen Foreman

multipliers are.

Q And do you know what percentiles, high and low, Ingenix applies the multipliers to?

A I recall some deposition testimony that it's at 80 and 50. But I can't say that I know that for a fact, that those are the levels for some of the illustrations and analysis here. The calculations were done using different levels as an illustration, because, at the time we did them, we didn't know what the exact numbers were.

Q So the analysis contained in your report regarding the high/low screen is not actually an analysis of the Ingenix high/low screen; is that correct?

MR. WHATLEY: Objection to the form.

A That's correct.

Q Take a look at, starting on paragraph 171, it says, "High/Low screen using Aetna data," just 171 to 175, what high/low screen are you applying in these

paragraphs to the Aetna data?

A In paragraphs 171 through 175, we took Aetna data and we used a classic Tukey, T-u-k-e-y, screen, or at least one of them -- Tukey had a number of them -- but the approach here applies a multiplier 1.5 to the top and low ends of the -- of what's called an inter-quartile range, so the 25th percentile and the 75th percentile.

Q And you indicated that Tukey had a number of screens. Do you recall which Tukey screen you selected?

A The one that is set forth here.

Q Okay. Is this the strong Tukey screen?

A I don't know that term.

Q And again -- strike that.

You indicated that this is only applied to Aetna data. Why did you choose Aetna data as opposed to all contributor data?

A At the time we ran this -- an illustration in this analysis, we ran a

Dr. Stephen Foreman

illustration. We did not do it here. This is Aetna data. We did not do it with the contributor data.

Q And looking at this analysis, it appears that you chose CPT state combinations; is that correct?

A That's correct.

Q And state combinations are larger than geo zip combinations; is that fair?

A That's correct.

Q Did you ever do an analysis of the effect of the actual Ingenix high/low screen on the Aetna data?

A No. We didn't.

Q Do you know -- well, you say "we." Who is "we"?

A Mr. Cohen did the high/low screen analysis in this section.

Q So when you say, "We didn't," I assume that means Frank Cohen never did an analysis of the high/low screen?

MR. WHATLEY: Objection to the form.

Dr. Stephen Foreman

the largest increases reflected in table seven?

A They are large. Compared generally, they are larger than the others.

Q Okay. And just looking at this transcript, I had an earlier question that was unclear. I asked:

Do you know if CIGNA uses Ingenix data to price claims billed with revenue codes?

A No, I don't.

Q And since these seven claims are larger than the others, presumably --

A Some of them are larger.

Q Since some of these --

A Some aren't.

Q -- some of these are larger, do the larger values -- what effect do the larger values have on your analysis?

MR. WHATLEY: Object to form.

A This is a simple average. So they would contribute to the overall -- you know, they would have greater influence on the overall to the extent they are.

Q And what would the effect be, if you removed the seven revenue codes from table seven, on your average?

A I don't know, but I could do it and would do it.

Q All right.

A Depending on what I learned about revenue codes and what they mean.

Q For the -- but, to date, sitting here today, you are not familiar with revenue codes?

A No, I'm not.

Q You have not come across revenue codes during the course of this litigation?

A No, I have not.

Q And you have not come across revenue codes during your work for the hospital in your case down in Houston?

A No, I have not.

Q And you have not come across revenue codes during your career as an econometrician for the health insurance industry?

A I have not encountered them before.

MR. WHATLEY: Object to the form of the question.

Q In your study for table seven, do you know how you accounted for negative charges contained in the CIGNA data?

A I can't recall as we sit here how I did that or if I did that. I have no memory of eliminating negative charges for that analysis.

Q Turning next to paragraphs 190 through 193, it's titled, "Four, descriptive analysis of the high/low screen." If you could just take a look at it.

One of the things you discussed yesterday was removing data from the contributor data for obvious errors, and you identified that one of the things that you removed were claims with charges of zero or less than a dollar; is that correct?

MR. WHATLEY: Objection to the

Dr. Stephen Foreman

standard deviations, you know, from a mean billed charge -- and that would be one way to limit that.

But that would need to be provided in the contract and transparent.

So the long and short of it is, you know, first question:

Are these values -- and focus on the 14,000 -- is it a mistake?

You know -- and, you know, if Aetna and CIGNA were to challenge the physician and say, "Look, is this a mistake," and it's established as a mistake, don't pay it.

If the physician states and supports the reason for it, pay it. If -- you know, if it's just, you know, a very large charge and the company is looking for a way to limit very large charges, spell out how it's done.

If you are using a percentile approach to approximate UCR, even spell that out.

I mean, if you are going to do

it -- but to see that the 80th percentile, for example, using percentile data -- I mean, if you're building percentiles for percentile data, to throw out not just the 14,000, which is an extreme example, you know -- but to throw out amounts that may be $128, for example, here for geo zip 926 -- and the high/low screen would throw out all values over 127.50 based on this illustration.

So you focused on the 14,000. But what about all the values between $128 and 14,000?

Q Two points, the first -- and I think you answered this -- the high/low screen that you applied in table eight is not the Ingenix high/low screen, correct?

A That's correct. This is a -- this is a high/low screen value developed with the -- I believe the CIGNA data over time for purposes of illustration, what happens when you apply a high/low screen year by year by year.

Q So, again, this isn't the

Dr. Stephen Foreman

Ingenix high/low screen; this is a high/low screen of your creation?

A Yes, from the CIGNA data.

Q Second, my question before that answer was a lot narrower than the answer I got, but you hit on what I was hoping you would answer.

You stated that, if the charge of $14,000 were to come in, that you would want to investigate the reason for that charge. So my question to you is:

What circumstances in your opinion would be appropriate for a provider to indicate that a 15-minute office visit of -- I believe you said it was intermediate complexity -- should be billed at $14,000?

What circumstances would justify that amount?

MR. WHATLEY: Objection to the form.

A Like you -- as we sit here, that appears on its face to be outlandish for a 15-minute office visit. But, also,

it's been done four times here. And, you know, that tends to indicate that there is a reason for it, one that we don't know as we sit here.

So that the question then -- if the contract involved for the employee provides for payment of billed charges or usual, customary, and reasonable, if the physician can establish that this is usual, customary, and reasonable, you know, it would be paid.

Q And sitting here today, I am asking you:

What would you be looking for from a physician to establish that $14,000 is uniform, customary, and reasonable --

MR. WHATLEY: Objection to the form.

Q -- for this CPT code 99213?

MR. WHATLEY: Objection to the form.

A I would be looking to establish for that physician -- actually, this may well be ambulance -- yes -- that -- an

Dr. Stephen Foreman

statement?

A As we sit here, I can't recall. I believe I may have taken it from one of the defendant's experts. I may have taken it from a deposition.

Q Sitting here today, you don't recall where you got that information?

A Not right now, I can't.

Q And your statement that eliminates 5 percent of the data and as much as 10 percent, are you aware of what percentage of that data is low charges as compared to the high charges.

A I think I recall taking that figure from either Ms. Gee or Ms. Sere's depositions. And in terms of claim counts, I believe that there's testimony in those depositions that, by numbers of claims, three times more lows may be eliminated than highs.

But that's -- that's a general memory. I mean, I can't say that that ratio is, you know, accurate per se. But that's sort of a general understanding that

I remember.

Q Okay. And to know what was actually said, we would go back and look at Ms. Gee's or Ms. Sere's deposition, you believe?

A I do.

Q If you could next take a look at paragraphs 206 through 209, titled, "Visual analysis of the high/low screen impact," and, again, this appears to be a review of some CIGNA CPT codes in specific geo zips; is that correct?

A That's correct.

Q And again this is not an application of the Ingenix screen, correct?

A That's correct.

Q This is --

A It's from the CIGNA simulation of the impact of the high/low screen over time that we talked about before.

Q And what is the screen that you used for the CIGNA simulation? I don't believe I asked that.

A I recall using the

80th percentile and the 50th percentile; and I can't remember what the multiplier that I applied to both ends -- to those ends of that screen was. It might have been 1.5 based on Tukey.

Q So you believe it was a Tukey, another application of the Tukey screen?

A It would have been at that time. Yes.

Q Do you know if it was the same Tukey screen that applied to the Aetna data that we discussed earlier?

A I believe. Well, I think that might -- I don't know if it was 50th and 80th, or it was 75 and 25 in the Aetna data; but it would have been -- I think the multiplier would have been similar.

We did 80th. I think the Aetna screen was at the 80th percentile, too, so it would have been similar.

Q Take a look at paragraph 176, Dr. Foreman, just to make sure we are all working off of the same script.

Right?

Exhibit 17

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY
MDL NO. 220
MASTER FILE NO. 2-07-CV-3541

IN RE: AETNA UCR LITIGATION

CONFIDENTIAL TRANSCRIPT OF
DEPOSITION OF DR. STEPHEN FOREMAN

TRANSCRIPT of the stenographic notes of the proceedings in the above-entitled matter, as taken by and before TAB PREWETT, a Registered Professional Reporter, a Certified Shorthand Reporter, a Certified LiveNote Reporter, and Notary Public, held at the Offices of GIBSON, DUNN & CRUTCHER, 200 Park Avenue, New York, New York, on Tuesday, October 11, 2011, commencing at 9:03 a.m.

the percent differences in your 300 and 350 CPT studies was attributable to the errors that you identified?

A No.

Q And when you use the word "material," how do you define that?

A In the context of how I'm using it here, the 300 CPT study -- we calculated a percent downward bias in the 300 CPT study for medical and dental. It's been a while.

It's approximately 11 percent and 8 percent, respectively. The 350 CPT study had a higher downward bias level in it. And the 500 CPT study and the 5000 CPT studies that corrected the errors found a downward bias for medical in the range of 19 to 20 percent and a downward bias in the dental for -- I can't exactly remember, but less than.

So the dental amount changed downward. And the medical difference increased. But the dental amount changed by only a small amount, not to the extent

that redoing the study increases the percentage downward bias for the medical. That's a function of the data, more so than the errors.

Q Dr. Foreman, you said that -- that the dental -- the percent difference went by a small amount?

A It did.

Q Is that analysis showing that the dental percent difference went down by a small amount contained in the Aetna declaration or expert reports?

A No, it's not.

Q As of today, are you relying on the 300 and the 350 CPT studies as bases for opinions you are offering in this litigation?

A No.

Q So you are not relying on the 300 or 350 CPT studies as bases for any opinions you are offering in this litigation?

A No, not anymore. We have gone beyond that in terms of understanding and

knowledge and dealing with the issues that we have been discussing. Also, the 300 and 350 CPT studies were a lot more limited than what we have been able to do since.

Q Dr. Foreman, turn with me, please, to page 39 of your declaration.

MR. WHATLEY: We are making progress.

Q Do you see paragraph 157 towards the bottom of page 29?

A I do.

Q And beginning with this paragraph, you are discussing the 500 CPT study, correct?

A Correct.

Q In the 500 CPT study, you took the most common medical/surgical CPT codes to select the 500 CPTs, correct?

A That's correct.

Q And how did you -- strike that.

From what source, did you determine what the most common CPT codes were?

A I believe we took the 2007

Dr. Stephen Foreman

contributor data and looked and ran a proc means to get frequencies and took the 500 most frequent.

Q Did you use the frequencies from the 2007 contributor data for all years in your 500 CPT study?

A No. Could you repeat the question?

Q Did you use the frequencies from the 2007 contributor data for all years in your 500 CPT study?

A No, we identified these CPTs; and those CPTs would have varied in 2006 and 2008.

Q So did you select a different set of 500 CPT codes for 2006 than you did for 2007?

A No.

Q So you selected the top 500 CPT codes using the 2007 contributor data and then you used the same 500 CPT codes for all years, correct?

A That's correct.

Q The only CPT codes that you

used in the 500 CPT study were in the medical/surgical module, correct?

A That's correct.

Q And when you say in your declaration that you included CPT geo zips with small numbers, do you mean that you included CPT geo zips with the number of occurrence of less than 256?

A Yes.

Q But you did not include CPT geo zips where the number of occurrences was less than nine, correct?

A I believe that's correct. It has been a while.

Q You are not sure sitting here today whether you included geo zips where the number of occurrences was less than nine correct?

A It was not our intent to include those. That's correct.

Q So you attempted to drop those CPT geo zips, correct?

A I believe so.

Q So your 500 CPT study does not

have any comparisons for the CPT geo zips where the occurrence is less than nine, correct?

A I think, if you look at the tables on pages 30 and 31, where the table on the left of the bottom of the page, where it says he say all -- I think that includes all of the combinations.

As we sit here, I can't remember if we even dropped less than nine. I would think we did, but I can't remember. If we didn't, we should have.

Q You meant to drop them?

A Meant to. And the table at the top on page 31 shows the analysis if you drop combinations with less than 255.

Q At the bottom of page 30, the table that you were just referring to contains some percent differences between alternative percentile values that you generated using contributor data and Ingenix values, correct?

A That's correct.

Q Are these the -- strike that.

Dr. Stephen Foreman

Are you relying on these percent differences to support your conclusions about the level of downward bias in Ingenix medical/surgical modules?

A I am using this to support the conclusions in this report that the prior findings of 11 percent and 8 percent were actually conservative.

I believe -- I believe we did not recompute damages for Aetna based on these. I believe it would be -- it would be appropriate, actually, to go to the next step and use the percent differences found for all CPT geo zip combinations to recompute the damages. But that wasn't done in this declaration.

Q Are you saying it would be proper to recompute damages based on the results of your 500 CPT study, Dr. Foreman?

A I am saying it would be proper to recompute damages based on the 5200, give or take complete CPT geo zip combination evaluation, that the culmination of this work -- the 500 study

is an intermediate step when we went from 300 to 350 to 500 to 5000 to 5200.

Q And, Dr. Foreman, the 5200 study that you just referred to is not in any of your reports or your declaration in this case; is that correct?

A That's correct.

Q Dr. Foreman, you did not control for units in calculating the percent differences contained in this table at the bottom of page 30, correct?

A I think that's correct. I think we didn't control for units until we got to the 5000 or the 5200. And I can't remember which.

Q Do you know the impact of not controlling for units on the percent differences found in your 500 CPT study?

A Back on page 28, we -- in fact, let me take that back. I think we may well have included the unit. I think we -- I think the way I did the 500 CPT was -- it's been so long.

I don't want -- I don't even

want to speculate about that.

But on page 29, the table there, that comparison of percentile values, difference in percentiles before and after controlling for units -- there's -- if you do simple averaging or weighted averaging between a 1.5 and 1.8 percent difference, that's what we found.

And the way we did that was to do the run with 500 CPTs without considering units and then drop the multiple unit lines to do that comparison. So --

Q Dr. Foreman, at this top of page 30, paragraph 160 starts with the phrase:

"While we did not control for units, given the negligible impact of them."

Do you see that?

A I do.

Q Does that refresh your recollection that you did not control for units in the 500 CPT study?

Dr. Stephen Foreman

A Ask the question, again, please, or please read the question back.

(Reporter read back pending question.)

MR. WHATLEY: Again, note my objection to the form.

A Yeah, I'm not sure that people have zero damages and are members of the class. I mean, that's what I would need to know to be able to answer the question.

Q Well, whether or not the claim lines in the CPT geo zips corresponding to equal or less columns are in the class, do you agree that there would be no damages on those claims?

MR. WHATLEY: Objection to the form.

A In terms of our damage calculation? You know, the damage calculation that I did, you know, in the merits report, there wouldn't be any damages that would have been calculated for those claims.

Q So there would be zero damages,

Dr. Stephen Foreman

correct?

MR. WHATLEY: Objection to the form.

A So I think so. But that's my damage calculation. That's -- you know, that's not giving the opinion on what class membership is, you know.

But, in general, the damage model that we used would not have provided any damages to people in those cases.

Now, I mean, also, this is a macro estimate on damages. You know, when we -- when we computed damages, we went line by line, and we changed the allowed amount. So to take -- to go from here to damages, I mean, it's a juxtaposition; and that I'm not sure is right.

Q Are you relying on your 5000 CPT study in connection with any damages model or calculation in this case?

A No.

Q Based on the damages model that you presented in your merits expert report, is it fair to say that claim lines in the

Dr. Stephen Foreman

equal or less column would have zero damages?

MR. WHATLEY: Objection to the form.

A That's correct.

Q In the 5000 CPT study, Dr. Foreman, some Ingenix values are greater. Some are less. And some are the same as the alternative percentile values that you generated, correct?

A Correct.

Q And in all of your four studies, some Ingenix values are greater; some are less; and some are the same as the alternative percentile values that you generated, correct?

A Correct.

Q Do you know how many class member claim lines fall into the categories for which Ingenix values are greater or equal to your alternative percentile values?

A No.

Q Let's turn to paragraph seven

modules, correct?

A Yes, probably 600 million, 700 million claim lines each year.

Q Given that all of your studies involved such a large amount of data and given that they were all designed to test for downward bias, wouldn't you expect the percent differences generated by those studies to be the same?

A Not necessarily.

Q And they would not be the same because you used different methodologies to conduct each of your studies?

A Yes. Basically, you know, we -- each of those studies had refinements in them in terms of things like lines versus units, you know, in terms of including or excluding modifiers, like we just talked about -- in terms of, you know, small cells.

There were differences in how some -- how each of those were conducted, and, also, in terms of the numbers of CPT geo zip combinations that were included in

the study.

Q Dr. Foreman, did anyone other than you review your 350, 500, or 5000 CPT studies?

A Mr. Cohen did the 300 CPT study. I did not review his code in doing that. I did the 350, the 500, and the 5000. And no, no one reviewed those.

Q Were any of these studies, your 350, 500, or 5000 CPT studies subject to peer review?

A No -- well, yes, defendant's experts had full -- full access to them and made comments based on them.

Q And other than review by defendant's experts, were the results of any of your four CPT studies subject to peer review?

A No.

Q Dr. Foreman, your 500 and 5000 CPT studies, did you use the same geo zips that Ingenix uses in generating percentile values?

A I used the first 3 digits of

the five-digit zip code to define a geo zip. At the time I believe it was the same. Ingenix doesn't always do it that way. Sometimes they combine geo zips. So there are some differences with Aetna's geo zip levels between what I used and what Ingenix used.

Q Did you use the same geo zips as Ingenix in any of your four CPT studies?

A Again, I used the first three digits of the five-digit zip code. I did that based on statements by Ingenix that that's how they did it. I believe that they are -- there's a difference between my definition of geo zips and Ingenix's.

To the extent that I would have time for additional work to go back and try to make them the same -- I'm not sure I understand exactly how Ingenix does it when they combine them.

Q And just to be clear, you know now that in each of your four studies you used a different set of geo zips than the geo zips used by Ingenix in generating the

Dr. Stephen Foreman

Ingenix product percentiles, correct?

A I believe that's correct. I do not know to the extent of the difference.

Q So you don't know the impact on the percentile differences that you found in your studies from your different geo zips, correct?

A That's correct. I do not.

MR. SIGLER: Let's take a break.

THE VIDEOGRAPHER: The time is 11:13 a.m., October 11, 2011. This completes tape number one in the videotaped deposition of Dr. Stephen Foreman.

(A break is taken.)

THE VIDEOGRAPHER: The time is 11:23 a.m., October 11, 2011. This is tape number two in the videotaped deposition of Dr. Stephen Foreman.

Q Dr. Foreman, before the break, we were talking about the geo zips, correct?

A Correct.

Dr. Stephen Foreman

Q And the fact that you used a different method of allocating charges to geo zips than Ingenix did, correct?

A I used geo zips based on the first three digits of the zip code, five-digit zip code. Ingenix indicated to me that they did that.

I have subsequently learned that for some -- and I don't know how many zip codes -- that they combined zip codes, geo zips.

So my geo zips differ from Ingenix's. To the extent to which they differ, I don't know. Currently, to the extent that I can determine how they differ, it would be -- I would be willing to go back and recompute these percentiles to see what the impact of that is, if any.

Q To have an apples-to-apples comparison, you agree it would be appropriate to use the same geo zips as Ingenix, correct?

A I agree.

Q Dr. Foreman, I would like to

understand how you counted for units in your 5000 CPT study. Let me give you an example of a hundred dollar physical therapy charge involving ten units.

How would you account for that charge in generating your percentile values in the 5000 CPT study?

A I can't remember, as I testified earlier, exactly how I did it at this point. I think that I divided the charge by the number of units. That's my recollection. You know, I can't be exactly sure.

I do not believe I multiplied -- I included that ten times in there because I didn't think it was appropriate to overweight it to that extent. But like I say that -- I would have to go back and look at my code to recall how I did it exactly. But it's my vague memory on how I did it.

Q That was your intent regarding how to do it, correct?

A I believe.

specialty type, and, also, to be complete on the list, the use of data derivations to approximate or guess at what percentile values are.

As I've noted in here, all of MDR -- all the percentiles in MDR are derived -- a substantial number of PHCS percentile values are derived. And those derivation processes themselves have issues.

Q So, Dr. Foreman, the "problem processes" that you are referring to here in paragraph 148 refer to the high/low screen, the lack of contemporaneous data, the proc type field, the definition of a geo zip, the specialty type, and data derivations?

A Yes. I may not have included all of them, but those are included. And again this -- this is exclusive of the representativeness issue.

Q Dr. Foreman, in addition to the problem processes that you just listed, you also excluded other data processing

Dr. Stephen Foreman

techniques that Ingenix uses when generating your alternative percentile values, correct?

A I'm sorry. I don't understand your question.

Q Well, let's turn to page seven of your report. Footnote six at the bottom of page seven says:

"Ingenix has a long list of data-cleaning procedures" -- cites to an Ingenix document -- and then it says:

"The scientific validity of these procedures has not been presented."

Do you see that?

A I do.

Q And so you would agree with me that there is a long list of data-cleaning procedures used by Ingenix that you haven't scientifically analyzed, correct?

A That's correct.

Q And you have excluded --

A Nor have I seen any evidence that Ingenix has. They come from a -- actually, there are two 600-type-page

documents.

And, yes, for purposes of what I have done here, I have not evaluated whether there are additional problem processes that are being used.

Now, it's one of the reasons that I have taken the macro approach to evaluating contributor data percentiles as opposed to Ingenix product percentiles. To the extent that there are these other processes, basically, if somehow they provide another source of bias, it would be buried in here.

Q And you don't know whether these other data processing techniques that you haven't analyzed are improper or provide the source of bias, correct?

A That's correct.

Q And you have excluded these other data processing techniques when generating your alternative percentile values, correct?

A That's correct.

Q Do you know the impact on your

percent differences in any of your CPT studies from excluding these other data processing techniques that you haven't analyzed?

A No.

Q In any of your four CPT studies, can you tell me what portion of the percent differences was caused by the specific data processing techniques that you have opined are sources of bias?

A No, I have not marked them down, and I have not attempted to independently study the impact of any of them. Part of the reason for that is that the processes are applied, you know, as a whole. There are interactions among the processes.

And so, for example, I have looked at the billed charge -- I will just use that as an example -- you know, the billed charge inflation over time. And the data is about 6 percent per year.

Now, you might be tempted to conclude that, you know, 6 percent of, you

Dr. Stephen Foreman

It is also possible that the customized fee analyzer that Ingenix produces may provide more accurate percentile values than PHCS. I haven't investigated that in any depth, so I say it's possible.

But I have no basis for an opinion that is more accurate or less accurate. But to the extent that MDR at least has the inflation adjustor in it, I think it would be my opinion that it would be more accurate.

Q Other than MDR and the customized fee analyzer and the sources that Dr. Cantor analyzed, are there any other sources of percentile charge data that you have analyzed in connection with your reports in this case?

A No, with the specific observation that I know of only one or two others. It is my understanding that -- I think the one other one that I am referring to, small portion of the market, is not used by many people, so no.

Dr. Stephen Foreman

Q Dr. Foreman, are any of the percentile values that you generated for any of your four CPT studies correct UCR amounts in your opinion?

A In my opinion, none of them are correct UCR amounts. In my opinion, after working with percentile values, particularly, what I -- you know, in fact, start with MDR.

MDR is totally derived. To that extent, what's being compared there with MDR is not an actual percentile value at all.

So the goal of UCR is to provide payment for the -- you know, the payment limit for the same or similar services in a geographic area. And the presumption that has been made in the industry using these percentile value tables is that some percentile may differ from, you know, plan to plan, even within a carrier -- is that those percentile values somehow reflect that concept.

The more information we learn

about developing percentile values, the clearer it becomes that most of what we identify as percentile values bears no relationship to anything other than some construct that we believe is a percentile value.

In other words, it has no relationship to UCR. And to put a point on it, very specifically, you know, for that universe of CPT geo zip combinations where we have no billed charge claims at all and that universe where we have those small number issues, which is a huge percentage of all of it, there is just no comparative information there.

Q Dr. Foreman, have you had any contact with Fair Health or the people involved with Fair Health since your last deposition?

A No, I have not.

Q Have you had any contact with the New York Attorney General's office related to Ingenix or Fair Health since your last deposition?

methodology, depending on -- well, yeah, for this CPT geo zip combination, the 500 CPT study amount would provide a basis for estimating damages.

And under the methodology we used -- well, first of all, the damage estimation in the merits report would have been the 135 less the 132. So that would have been the 300 CPT study amount, or the allowed would have been 135 compared to what was actually adjusted allowed versus the 132.

As I've indicated, you know, as we have broadened and refined the 500 CPT study, it would provide an alternative amount of 145 less the 132.

Q So, Dr. Foreman, are you saying that the $145 alternative percentile value from the 5000 CPT study could be used to calculate damages on this claim?

A Yes.

MR. WHATLEY: Objection to the form.

A Again, subject to deductibles

Dr. Stephen Foreman

and co-payments and coordination of benefits.

Q Would it also be appropriate to use any of the other alternative percentile values from the 300, 350, or 500 CPT studies to calculate damages?

A As I've noted, the alternative damage calculation that's in the merits report would have used the 135 from the 300 CPT study.

So the existing damage calculation, you know, which is what I have done so far -- I have not done a damage calculation based on the 5000 CPT study. So the existing damage calculation uses the 300 CPT study adjustment.

Q And is the existing damages calculation based on the 300 CPT study a proper damages calculation in your view?

MR. WHATLEY: Object to form.

A In my view the proper damages calculation here would be the $154 billed charge amount less the allowed amount, the actual allowed amount that was performed

Dr. Stephen Foreman

using the Ingenix 80th of 132.

So that's why my primary damage estimate is billed charge minus allowed. The alternative would, you know, as calculated so far, would be the 300 CPT.

I think it would be appropriate to modify that, you know, based on further work; but, so far, you know, the primary amount is billed minus allowed. And that's 154 minus 132. The alternative is the 135 minus the 132. And that's the alternative amount in the damages that we have calculated.

Q And assuming that the accurate allowed damages methodology is the appropriate damages methodology instead of the billed charges method, are you testifying that the $145 value from the 5000 CPT study could be used in that methodology?

A Yes.

MR. WHATLEY: Dr. Foreman, could you flip the "mic" up a little higher.

Exhibit 18

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

IN RE: Aetna UCR LITIGATION,	**MDL NO. 2020**
This Document Relates To: ALL CASES	**MASTER FILE NO. 2:07-CV-3541 (FSH) (PS)**

EXPERT REPORT OF THOMAS R. McCARTHY

November 10, 2010

CONFIDENTIAL – ATTORNEYS' EYES ONLY

CONTENTS

I. INTRODUCTION

A. Qualifications

1. I am an economist and senior vice president employed by NERA Economic Consulting (NERA), an international economic consulting firm. I am the head of NERA's health care practice. I hold a B.A. degree in economics from Assumption College in Worcester, Massachusetts, and M.A. and Ph.D. degrees in economics from the University of Maryland. For the last thirty years, I have specialized in the study of industrial organization and health economics, focusing principally on antitrust and competitive issues in the health care marketplace, as well as on intellectual property issues, often involving medical devices.[1] My work also includes the study of health insurance reform. I am co-editor and a principal author of a two-volume study of health reform around the world entitled, *Financing Health Care*.

2. I have testified in a variety of antitrust cases relating to health provider services and health insurance markets, including the RICO case called *In Re Managed Care Litigation MDL 1334* (also called the "Provider Track" litigation). I have also made presentations to state and federal antitrust agencies on the likely competitive effects of a wide range of hospital mergers, health plan mergers, and medical device company mergers being reviewed by those agencies. During 2003, I was invited by the Federal Trade Commission and the U.S. Department of Justice to testify at three sessions of their joint hearings on Health Care and Competition Law and Policy. The topics I was asked to testify on included hospital contracting issues and monopsony issues in the health insurance industry. Prior to joining NERA, I worked as a Staff Economist for the Federal Trade Commission in Washington, D.C., and as an Assistant Professor of Economics at the School of Economics and Management of Oakland University in Michigan, where I taught, among other courses, health economics. A more complete listing of my qualifications, publications, and prior testimony is provided in my curriculum vitae found in Exhibit 1.

[1] Industrial organization is the branch of economics that deals generally with antitrust matters.

B. Understanding of Claims

3. This is a class action involving three categories of plaintiffs (subscribers, providers, and provider associations) and a number of different class definitions.[2] The defendants consist of Aetna Health Inc. PA, Corp. and various related companies (Aetna) for all claims, and UnitedHealth Group (UHG) and Ingenix (a subsidiary of UHG) for plaintiff Weintraub's claims.[3] The Amended Class Action Complaint includes a number of different counts, including six conspiracy counts. The first four conspiracy counts are RICO counts, whereas the last two are Sherman Act counts. Three of the conspiracy counts deal with the subscribers and three of them deal with the providers.

4. In the Amended Class Action Complaint, plaintiffs claim that Aetna, UHG, Ingenix, and most of the country's largest insurers engaged in an alleged conspiracy to systematically under-reimburse consumers for out-of-network healthcare services.[4] Plaintiffs also claim that the main instruments used to accomplish the alleged conspiracy were the two Ingenix databases (the Prevailing Healthcare Charges System (PHCS) and the Medical Data Research System (MDR)), each of which specified provider charge amounts for various percentiles (e.g., 80th, 85th, and 90th) by procedure code and geozip code for all areas in the United States.[5] Plaintiffs further claim that the alleged conspiracy worked by Ingenix inappropriately reducing the charge amounts associated with the various percentiles and then providing the suppressed percentiles to Aetna and the other payers to use when setting the usual, customary, and reasonable rates (UCRs) for out-of-network services.[6]

5. Additionally, plaintiffs claim that the relevant markets at issue are the Data Market for the provider charge information and the "Linked Market" for the reimbursement of

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[2] Joint Consolidated Amended Class Action Complaint and Demand for Jury Trial, pp. 1-2 and 142-148.

[3] Plaintiff Weintraub is an Aetna subscriber.

[4] Joint Consolidated Amended Class Action Complaint and Demand for Jury Trial, ¶ 5.

[5] *Ibid.*, ¶ 6. A geozip represents a number of zip codes grouped together, based largely on the first three digits of the zip codes.

[6] *Ibid.*, ¶¶ 131 and 505-506. It is my understanding that Aetna refers to UCRs as Reasonable and Customary (R&C).

out-of-network healthcare services.[7] Plaintiffs also claim that the alleged conspiracy has harmed competition in the Data Market as a result of the manipulation of the provider charge amounts and in the Linked Market as a result of the alleged conspirators using the "False" UCRs in order to reimburse for the out-of-network healthcare services.[8] Finally, plaintiffs claim that the alleged conspiracy began January 1, 1998 after Ingenix had acquired both the MDR and PHCS databases.[9]

C. Assignment

6. I have been retained by counsel for Aetna to review and comment on the conspiracy opinions rendered by the plaintiffs' experts in their merits reports. In particular, I have been asked to evaluate the following issues:

- Is the alleged conspiracy economically plausible?
- Have the defendants exercised market power in the Data Market and are the two alleged Linked Markets proper relevant markets?
- Is there any economic evidence that the alleged conspiracy has taken place?
- Did the alleged conspiracy harm competition?
- Have the proposed classes suffered antitrust injury?
- Did Aetna and the alleged co-conspirators have a reasonable business justification for submitting their data to Ingenix, using the Ingenix databases, and the other practices at issue?

I will also address a number of other mischaracterizations and overstatements that plaintiffs' experts make regarding their conspiracy opinions. In addition, counsel asked me to analyze Dr. Foreman's 300/350 CPT studies and to comment on his opinions about suppression and the possibility of systematic downward bias.

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[7] *Ibid.*, ¶ 510. Plaintiffs' conspiracy expert, Dr. Gordon Rausser, claims that the Linked Market for the issuance of PPO and POS insurance plans is another relevant market at issue in this case.

[8] *Ibid.*, ¶ 515.

[9] *Ibid.*, pp. 189-192. Although the Amended Class Action Complaint states that Ingenix acquired PHCS on January 1, 1998, Ingenix did not actually acquire that company until on or around October 15th of that year. [INGENIXMDL0000003101-3131]

D. Materials Relied Upon

7. In performing my work in this matter, I have relied upon a variety of materials. These materials include the Amended Class Action Complaint, the Motion in Support of Certifying the Classes, the Motion in Opposition to Certifying the Classes, the Motion to Exclude Portions of Plaintiffs' Experts Testimony, Plaintiffs' Reply to Defendants' Motion to Exclude (including the declarations of Drs. Stephen Foreman and Gordon Rausser), and various depositions of the named plaintiffs and defendant fact witnesses. The materials also include the class certification reports, deposition testimony, and merits reports of plaintiffs' experts (Drs. Stephen Foreman, Gordon Rausser, and Bernard Siskin), the class certification reports and deposition testimony of defendants' experts (Drs. Robin Cantor, Andrew Joskow, and Daniel Slottje), and the class certification report of CIGNA's expert (Dr. Monica Noether) in a related matter. The materials further include various documents and data produced by the defendants, including UCR language from assorted Aetna plans and the Ingenix PHCS database and the contributor data.[10] Additionally, the materials include a number of publicly available materials, such as the New York Attorney General's report and U.S. Senate's report on the Ingenix databases. A complete list of all of the information sources that I have relied upon in reaching my opinions in this report is found in Exhibit 2.

8. NERA's compensation for my time is $675 per hour, which is the standard hourly rate that NERA charges for my time. Similarly, NERA's compensation for my staff's time is at standard hourly rates. No payments to NERA are contingent upon the outcome of this case or upon the nature of my opinions.

II. SUMMARY OF OPINIONS

9. My opinions in this matter are based on my training and experience as a health and industrial organization economist and on my review and analysis of much of the available record. Since Dr. Rausser has not yet been deposed regarding his merits report and recent declaration, I reserve the right to refine my opinions as new information becomes available. However, based on what I have seen to date, I do not expect my opinions to change materially.

[10] The contributor data represent the charge data that Ingenix received from the payers and used to create the PHCS and MDR databases.

In the remainder of this report, I will explain in detail the basis for each of the opinions summarized below:

A. Overview and Critique of Dr. Rausser's Conspiracy Analysis

10. Simply stated, Dr. Rausser's construction of the alleged conspiracy does not make economic sense. Collecting charge data, contributing charge data, and buying charge data for use in setting out-of-network reimbursement rates to health plan members are all entirely consistent with the independent, self-interest of each of the many, many alleged conspirators and co-ordinators that Dr. Rausser assumes make up the conspiracy. In fact, all of these activities occur in the but-for world that plaintiffs offer—that is, one where the same information is collected and used but the distributions are not suppressed, as alleged. There is no argument made that the aggregation and processing of the charge data is itself a problem. In fact, the new FAIR Health plan will do the same thing.

11. Dr. Rausser does not prove that a conspiracy exists, even as a simple agreement among the payers to use Ingenix data or choose a common percentile. He simply assumes a conspiracy to suppress the Ingenix percentiles without specifying how this alleged conspiracy came about or who will do what to advance the conspiracy. He does not show who has agreed to participate or how they formed and implemented the conspiratorial agreement, only that many parties use Ingenix data. Most importantly, he does not demonstrate how the allegedly anticompetitive outcomes are anything different from what self-interested, independent companies would do to manage their health insurance costs with or without Ingenix.

12. Similarly, Dr. Rausser does not demonstrate that the alleged antitrust conspiracy has had any effect on out-of-network payment levels, instead leaving that to others, like Dr. Foreman (whose analysis does not stand up to scrutiny, as described in detail below). But even if he relies on others to demonstrate systematic suppression, neither Dr. Rausser nor any other expert has gone on to demonstrate that the resulting out-of-network payments are lower than what a reasonable and acceptable payment would be in a competitive market without the Ingenix process. Thus, even if suppression is assumed, he has not demonstrated any harm to competition or any antitrust injury because he has no competitive benchmark against which to measure harm.

13. Dr. Rausser's conspiracy involves far too many parties with very different interests and no need to conspire. Ingenix compiles the databases and licenses them to insurers. It does not determine what percentiles from the databases that the licensees will use. Insurers then offer a wide range of percentiles to employers who can choose a high one or a low one, or something in between. There is no need to conspire to adopt lower out-of-network rates. And if the alleged conspirators were to take the risk and the trouble to conspire, insurers would quickly realize that the alleged out-of-network savings would simply be competed away when trying to win new subscribers. Further, if such conspiracies were possible in these markets (which they are not), fixing in-network rates would produce far more savings, but even these alleged savings would also be competed away when trying to win new members. In the end, Dr. Rausser's arguments must rest on the very heroic and unproven assumption that all insurers and users of the Ingenix data either agreed to use—or will mindlessly use—the same percentile reimbursement. But in Dr. Rausser's latest explanation of his conspiracy, most of the alleged conspirators do not even realize they are part of an antitrust conspiracy and they can choose any percentile and still be part of the conspiracy. They are only "effective coordinators," not "active conspirators." This, of course, demonstrates that most firms in the alleged conspiracy are not working against their own interests to be part of a conspiracy—they are just making economic choices that best manage the costs and benefits of providing a package of health care coverage to their employees.

14. Many of these so-called "effective coordinators" in the alleged conspiracy are large, self-insured companies. Approximately two-thirds of Aetna's members are currently in this category. These self-insured firms pay most, if not all, of the medical bills of their employees and their dependents. Such a self-insured firm has a clear incentive to balance the costs of providing out-of-network care with the attractiveness to their employees of having out-of-network benefits that offer greater provider choice as part of total compensation. These companies internalize that trade-off and, if they choose a similar percentile level, they choose that same range of percentiles because, for them, it strikes a reasonable balance between the costs and benefits of providing out-of-network coverage. Thus, choosing to pay members at a rate somewhere around the 80th percentile is not the result of a contrived and complicated conspiracy but, rather, is simply the market outcome that generally balances a company's desire

to provide a valued benefit to its employees and yet control the premium or self-insured medical costs of paying for the benefit.

15. The resulting reimbursement rates observed are among the highest rates paid to physicians. Dr. Rausser has not demonstrated that, absent a conspiracy, these reimbursements would be higher. He has not explained why the many users of Ingenix data would not simply switch to a lower percentile reimbursement to keep their preferred balance, even if the Ingenix 80th percentile reimbursements were raised as a result of plaintiffs' complaints. Further, even if the Ingenix percentiles were suppressed (which I find no evidence of), the savings captured by the insurers would be passed on to members in the form of lower premiums (or lower self-insured medical costs) as a result of competition. In fact, these lower premiums for a lower out-of-network percentile threshold are available now under a variety of Aetna PPO and POS plans.[11] Thus, there is no plausible reason or incentive for insurers to join such a conspiracy.

16. In the end, this alleged conspiracy makes no economic sense because it involves insurers and self-insured employers supposedly joining a conspiracy just to be able to take money out of one pocket and put it in another. They can do that without a conspiracy. The vast majority of Aetna members with out-of-network coverage are under plans that allow the employer to set the percentile. For the fully-insured firm, setting a low percentile means higher out-of-pocket costs for employees and lower premiums for both the employer and employee. That is a simple trade-off. For self-insured firms, balancing this trade-off is even more direct. If the self-insured employer does not want to offer a high percentile reimbursement for out-of-network care, the employer can just set it at a low level, capture the savings, and shift more risk to any patient who goes out of network. If that hurts the employer in recruiting a talented labor force, the employer may decide to improve the benefits. Still, there is no need to join a conspiracy to adopt a stingy out-of-network plan, if that is what the firm wants. Dr. Rausser's conspiracy does not address any of these issues and is simply economically implausible.

[11] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, Exhibit 20.

B. Specific Opinions

17. *The alleged conspiracy is economically implausible.* According to Dr. Rausser, the alleged conspirators and co-ordinators consisted of all of the entities that licensed the Ingenix databases—which ranged from 1,180 to approximately 2,000 entities during the 2005 to 2009 period. Moreover, these entities included health insurers, third party administrators, rental networks, self-insured employers, hospitals, IPAs/medical groups, and surgery centers. Such a large group represents too many parties with very different interests to believe that they could have successfully formed, implemented, and maintained a conspiratorial agreement from 1998 to the present. In addition, Dr. Rausser asserts that every action taken by the alleged conspirators was consistent with the conspiracy having taken place (such as the parties conspiring in some markets, but not others), and that the subscribers and providers had no way to defend themselves against the alleged conspiracy. Thus, the alleged conspiracy is not believable since every possible action by any party is claimed to be consistent with it. Further, apparently the alleged conspirators could have achieved their goals without conspiring since the subscribers and providers supposedly had no alternatives anyway. Finally, Dr. Rausser states that the alleged conspiracy only involved the Ingenix databases and that the Coordination of Benefits (COB) process could successfully be used to monitor it. However, the Ingenix databases were only one method that the payers used to reimburse for out-of-network services and the COB process cannot always tell what method was actually used. Further, Dr. Rausser admits he has no evidence that the COB process has ever been used by any conspirator to monitor the percentile levels of any rivals. Therefore, the alleged conspiracy is also economically implausible since it did not control for all of the methods used to reimburse for out-of-network services and there was no way to successfully monitor it. Finally, if cheating on the alleged conspiracy involves using a non-Ingenix database, it is a hollow threat to take away the Ingenix products from any conspirator that cheats, as Dr. Rausser suggests.

18. *Ingenix has not exercised market power in the Data Market. Further, the Linked Markets are not proper relevant markets.* Dr. Rausser claims that there are three relevant markets at issue in this case: (1) the Data Market, (2) the Linked Market for the "reimbursement of out-of-network health and dental services," and (3) the Linked Market for the "issuance of PPO and POS insurance plans." Dr. Rausser also claims that Ingenix has exercised market

power in the Data Market, although he does not identify how many companies compete in this market. By definition, an exercise of market power means that the firm has increased the price of its product above competitive levels or has lowered the quality of its product below the level found in competitive markets. In this case, I have seen no evidence that indicates that Ingenix has increased the price of its databases above competitive levels or that it has decreased the quality of its databases below the level that would be found in competitive markets, nor does Dr. Rausser offer any. Therefore, Dr. Rausser's opinion that Ingenix has exercised market power in the Data Market is unsupported. More importantly, since the alleged conspirators can choose any percentile they want under Dr. Rausser's theory, even if there were a conspiracy in the Data Market, the alleged conspiracy's suppressed result is easily undone by firms independently choosing what is best for them when deciding on what level of out-of-network benefits to offer.

19. In addition, a relevant market involves the situation where products or services are bought or sold, and it is supposed to include all products or services that are good demand or supply substitutes for each other. Thus, neither of Dr. Rausser's Linked Markets is a proper relevant market since "reimbursements" and "issuance of insurance plans" are not items that are bought or sold. Moreover, in-network services are good supply substitutes for out-of-network services and HMO products are good demand substitutes for PPO and POS products. For Dr. Rausser, the proper definitions for the markets that are "linked" in this case would be the markets for provider services and the markets for health insurance. However, this matter does not even involve out-of-network providers in any direct way—that is, any injuries to them are purely derivative of any injuries to subscribers, and are therefore indirect. Pricing in these provider services markets is not implicated because the prices the out-of-network providers charge for their services are not set and are not negotiated by any of the alleged conspirators. These out-of-network providers can set any price they want and simply balance bill the patient to gain their full price if they want to collect that amount, leaving the problem of an alleged underpayment to be debated by the insurer and the subscriber.[12] At best, the providers are only involved indirectly, not suppliers in a market that is affected by the alleged harm to competition.

[12] For a provider who can balance bill the patient and elects not to, that provider has not collected the balance based on his or her own voluntary decision.

20. *There is no economic evidence that the alleged conspiracy has actually taken place or that systematic suppression has occurred*. According to Dr. Rausser, the key impact of the alleged conspiracy is the suppression of the percentiles in the Ingenix databases. In fact, he starts from the presumption that a conspiracy exists based almost entirely on the alleged finding that suppression has occurred. However, he acknowledges that he has not independently examined the Ingenix databases. Instead, he has relied upon the analysis conducted by plaintiff's damages expert, Dr. Foreman. This is a critical assumption because the only economic evidence that Dr. Rausser has on which to base his alleged conspiracy is the Foreman analysis. I find Dr. Foreman's analysis to be unreliable because his methodology is flawed and his results are inaccurate.

21. Besides Dr. Foreman's analysis, there have been four other analyses that have examined whether the percentiles in the Ingenix databases were suppressed, including one which I conducted and report on below. All of these other analyses found that there was no systematic downward bias in the Ingenix percentiles. Moreover, my analysis of the Ingenix databases involved using Dr. Foreman's basic framework but correcting his two CPT studies for various computational and other errors. That is, my analysis first reviews and replicates Dr. Foreman's studies, then corrects and re-estimates the studies, rather than blindly relying on them, as Dr. Rausser has done. In my review and replication of Dr. Foreman's studies, I found that he has made a number of important errors. These include (1) incorrectly comparing contributor data from one time period with the Ingenix PHCS results created using contributor data from earlier time periods; (2) incorrectly including facility claims in the contributor data when comparing the results to the physician claims analyzed in the Ingenix PHCS percentiles for the medical and surgical modules; (3) incorrectly comparing contributor percentiles based on both the professional and technical amounts to Ingenix percentiles based on the professional amount only; (4) incorrectly building his contributor distributions based on claim lines without counting the units associated with each claim line; and (5) incorrectly including duplicate records in the analysis.

22. I found that correcting these errors, as well some others, reversed Dr. Foreman's findings. For example, Dr. Foreman reported that the Ingenix reimbursement values at the 80th percentile (Ingenix 80) for the 350 CPT Study equaled or exceeded his estimated contributor 80th

percentile values (Contributor 80) for only 38.7 percent of the CPT-geozip combinations for the Ingenix PHCS 2008 Release 1. However, after correcting the various errors, the percentage of Ingenix 80 results that equaled or exceeded the Contributor 80 estimate increased to 85.7 percent. This result, of course, indicates that there was no systematic downward bias in the way Ingenix processed the data. Likewise, Dr. Foreman reported that, based on the 300 CPT Study, the estimated weighted average downward bias for the Ingenix PHCS medical and surgical modules equaled 11.2 percent. Again, after correcting the various errors, the estimated downward bias based on Dr. Foreman's method decreased to only 0.97 percent, which is also consistent with the percentiles in the Ingenix databases not being suppressed.

23. In his declaration, Dr. Rausser says that he has "also identified several 'plus factors' that are traditional indications of concerted action." Although I do not agree with all of his characterizations of the so-called plus factors, even if true, their adoption would also be consistent with the independent, unilateral self-interest of the alleged conspirators. For example, one of the plus factors is the allegation that the major insurers worked against their own self interests. In particular, Dr. Rausser claims that Aetna and CIGNA should have entered the Data Market and competed against Ingenix. This conclusion assumes that (1) Ingenix was earning supranormal profits in the Data Market as a result of exercising its market power and (2) there was enough room in the Data Market for other competitors. As discussed above, there is no evidence that Ingenix had exercised market power in the Data Market. Likewise, the Data Market is subject to scale economies in the collection and processing of charges data and may not be able to support more than a few firms, as well as the public databases that exist from CMS. Therefore, contrary to Dr. Rausser's assertion, it was in Aetna's and CIGNA's own independent, self-interest not to enter the Data Market.

24. Other information also indicates that the alleged conspiracy has not taken place. For example, during the 2002 to 2008 period, Aetna paid 82.8 percent of the out-of-network claims subject to Ingenix-based fee schedules at full billed charges. This is not what you would expect to see if Aetna had been engaged in a conspiracy to reduce out-of-network reimbursements. In addition, during the 2001 to 2008 period, CIGNA paid more than 92.5 percent of its out-of-network medical and surgical claims at full billed charges or by using methods other than the Ingenix databases. Again, this is not what you would expect to see

assuming that an alleged conspiracy based on the use of the Ingenix databases had taken place. Also, Dr. Rausser claims that the alleged conspiracy has resulted in the health insurers earning higher profits and incurring lower medical costs. However, an examination of the health insurers' profit margins and medical cost ratios shows that they did not all experience strong and stable financial performance during the period when the alleged conspiracy was supposedly taking place.

25. *The alleged conspiracy has not harmed competition*. According to Dr. Rausser, "[t]he factual evidence reveals that the market in which injury occurs is that for reimbursement of out-of-network health and dental services." It is my understanding, however, that the plaintiff providers are only in this case because some of them have taken assignment from the subscribers and are seeking to be paid the "true" UCR amounts that they believe the insurers should have authorized for the out-of-network services. Importantly, since the providers have always had the ability to balance bill the patients to make up any difference between the "true" UCR amounts and the allowed amounts that the insurers authorized, this means the alleged conspiracy could not have harmed competition in the markets for out-of-network provider services, assuming such a market even exists. The insurers and self-insured employers do not negotiate prices with these providers nor do they set the prices charged by these providers.

26. Because the plaintiff providers have always had the ability to balance bill, this means that the only plaintiffs that the alleged conspiracy could have directly injured as a result of an alleged conspiracy are the plaintiff subscribers. Although Dr. Rausser suggested that the injury took place in the provider services market, this is not the correct way to think about it. Economically, what the plaintiffs might be claiming is that there has been a harm to competition in the health insurance markets since the alleged conspiracy supposedly allowed the health insurers and self-insured employers to reduce the level of benefits that the subscribers had paid their premiums for. They allegedly reduced the level of benefits by making the subscribers pay more for out-of-network healthcare services than they might have paid had there been no suppression of the data by Ingenix.

27. For competition to have been harmed in the health insurance markets through a reduction in the level of out-of-network benefits, it has to be the case that (1) the alleged conspiracy suppressed the percentiles in the Ingenix databases; (2) the buyers of out-of-network

coverage do not understand and monitor their out-of-network benefits in an effort to balance subscriber/employee satisfaction with the offered coverage and the need to control out-of-network costs; (3) this resulted in allowed amounts being less than what would be found under independent, self-interested competitive conditions; *and* (4) the insurers and self-insured employers did not pass on the cost savings from the lower reimbursements to the subscribers in the form of lower premiums (though this is a very puzzling notion for self-insured firms who could just drop the out-of-network coverage if cutting costs was all they were interested in doing).

28. As mentioned above, there is no evidence that the percentiles in the Ingenix databases have been suppressed. As such, this is sufficient for demonstrating that there has not been a harm to competition. However, to also investigate whether the allowed amounts that Aetna authorized during the 2006 through 2008 period represented competitive payment levels, I compared the 80th percentile amounts in the Ingenix PHCS database (i.e., the Ingenix 80) with the amounts listed in the Medicare fee schedule for Dr. Foreman's list of 350 CPT codes and 450 geozips. Of course, a strong majority of all physicians accept Medicare as payment in full for a substantial number of their patients, though Medicare payments are not the highest rates physicians usually receive. The results of my analysis show that the Ingenix 80 amount is a very generous payment when compared to the Medicare fee schedule. For example, on average, the Ingenix 80-based payment equaled 246.5 percent of the Medicare fee schedule for 2006—that is, a reimbursement that is almost two-and-a-half times greater than what Medicare pays. Similarly, based on the frequency of the CPT being performed, the weighted average Ingenix 80 rate was 203.5 percent of Medicare. There are very few commercial rates available to physicians in almost any competitive market that are this generous. As such, this further supports the conclusion that the alleged conspiracy did not harm competition by lowering out-of-network reimbursements to below-competitive rates, even assuming that it actually took place.

29. *The proposed classes have not suffered antitrust injury*. It is my understanding that for plaintiffs to have suffered antitrust injury, they must show that the alleged conspiracy harmed competition *and* that they were injured as a consequence. As described above, I find no evidence that the alleged conspiracy has harmed competition in any of the relevant markets at issue in this case. Likewise, I find no evidence that the alleged conspiracy injured the proposed

classes. In particular, the plaintiff subscribers were not injured since the allowed amounts that the insurers and self-insured employers authorized were reasonable and generous as compared to actual competitive levels of payment, and the plaintiff providers were not injured since they have always had the ability to balance bill the subscribers. These providers cannot have suffered a harm to competition since there has not been one and because their market is not directly affected by the alleged conspiracy.

30. *Aetna and the alleged co-conspirators had a reasonable business justification for submitting their data to Ingenix, using the Ingenix databases, and the other practices*. Plaintiffs claim that the alleged conspirators adopted their practices to facilitate the alleged conspiracy. However, each supposed conspirator had an independent, unilateral self-interest for adopting each of the practices. For example, the entities that submitted data to Ingenix received a sizeable discount when purchasing the Ingenix databases. Also, the economics of the Data Market would naturally encourage the aggregation of data into a very large database to develop more reliable data distributions based on many more observations. This is efficient and generally cost-saving response to the need for such data. In fact, it is the same model of centralized data aggregation and analysis being followed by the FAIR Health plan, which is the foundation-based vendor that will be taking over the Ingenix databases. As such, the contributors had an incentive to submit their data to Ingenix instead of trying to create a competing product. Similarly, Aetna switched to using the Ingenix PHCS database since it was much larger and more complete than Aetna's own claims data. Also, it did so in 1996 prior to Ingenix acquiring the PHCS database and, thus, prior to the start of the alleged conspiracy. Finally, the COB process serves a valuable purpose since there needs to be a method for determining how much each payer must contribute when there is both a primary and secondary payer covering the same person with a health loss. In addition, payers began using the COB process in the 1960s, more than 30 years before the alleged conspiracy supposedly began, and much of that process is circumscribed by state regulators.

31. *Plaintiffs' experts have made a number of other mischaracterizations and overstatements*. For instance, Dr. Rausser suggests that the alleged conspirators used a Liaison Committee to help implement and facilitate the alleged conspiracy. However, the record indicates that the Liaison Committee rarely (if ever) met. Likewise, Dr. Rausser asserts that the

"the mandatory contracts between Ingenix and its insurer 'Customers' include confidentiality agreements that explicitly prohibit insurers from disclosing information about the Ingenix databases to either consumers or physicians." However, a review of Aetna's license agreement with Ingenix shows that, even though the agreement does include a confidentiality clause, the clause allows Aetna to disclose the information to subscribers and providers upon request. Moreover, there are legitimate, non-conspiratorial business reasons (such as preventing free-riding) why a data provider would not want a licensee to make its information publicly available. As a final example, Dr. Rausser asserts that, absent the alleged conspiracy, he would expect to see health plans compete by raising their out-of-network reimbursement levels, perhaps to levels above the highest Ingenix percentile, which is the 95th percentile. This scenario is simply not realistic given the rapid escalation in most charges distributions beyond the 90th percentile and given the pivotal role employers play in the purchasing of health coverage. Moreover, this is a choice already available to employers and for the most part they have not found Dr. Rausser's suggestion to be an attractive alternative since the increase in out-of-network costs would result in an increase in premiums for their employees.

III. BACKGROUND

A. The Payers Have an Incentive to Control Costs

32. There are a number of different entities that are responsible for paying medical costs. These include the private sector entities such as the health insurers, self-insured employers, and employees. They also include government entities such as Medicare, Medicaid, and various county indigent programs. All of these entities have an incentive to control medical costs. For example, insurers compete for subscribers or members based, in part, on their premiums. The premiums, in turn, depend on the benefit design and the expected medical costs that the members are likely to incur under that plan, including costs for out-of-network services if that benefit is included in the subscriber's policy. Therefore, the insurers have an incentive to keep any and all of their medical costs down in order to better compete for subscribers by keeping premiums low for the package of benefits offered. Of course, in trying to attract employers and employees to join a particular health plan, that plan must offer the mix of benefits that employees will find valuable. Otherwise, the employer will have difficulty recruiting and retaining talented workers. In some cases, the employer and employees may feel that the

acceptable package must include some sort of out-of-network coverage to supplement the in-network benefits. As such, the employer and/or employee may choose a policy that has generous out-of-network provisions with low co-insurance and deductibles or, perhaps, much less generous out-of-network benefits designed to keep premiums slightly lower and to encourage the use of less costly in-network providers. The choice, in part, depends on job market conditions. "Hot" job markets are generally likely to offer broader and deeper benefits to attract top talent than what will be the standard in a weak job market.

33. Self-insured employers also compete for employees based, in part, on the health benefits that they offer. Again, generally, the richer the health insurance package, the easier it is to attract good employees. However, just as the fully-insured employers try to minimize premium costs for a given benefits package, the self-insured employers also try to minimize their costs for providing health care coverage. Since the self-insured employers bear the risk and pay for their employees medical costs out of their profits, this means the greater their medical costs, the lower their profits. These employers thus have a natural incentive to control medical costs.

34. Historically, employers primarily used indemnity insurance plans to provide health insurance for their members. These plans typically paid the health care providers on a variety of fee-for-service schedules, based mostly on the claims submitted by the providers. The fee-for-service method paid providers separately for each procedure or service, and the fee-for-service schedules were typically based on usual, customary, and reasonable (UCR) charge amounts. Virtually all providers were (by definition) out-of-network providers under indemnity plans, with subscribers able to choose virtually any provider. These indemnity plans had no in-network participating providers. As such, contracts specifying fee schedules were usually not directly signed between providers and insurers.

35. The indemnity insurance plans tended to be costly since they had few cost controls. For instance, as one researcher wrote:

> "…[W]ith insurance footing most of the bill, patients had little incentive to shop around for the best price. This alone would encourage providers to increase prices and pay a little less attention to costs. But additional factors took even more of the edge off of price competition in the health economy. Even if patients had an economic incentive to shop around for the best price, they often would have done so under the duress of illness. On top of that, they would have been baffled by the prospect of comparing prices across providers. Providers did not

> price out treatments; instead, they priced individual services, such as a lab test, an office visit, and a minute in the operating room. This made comparison shopping for the best price almost impossible."[13]

In addition, the indemnity insurance plans tended to be inflationary since they created an incentive for the physicians to continue to raise their charges because the fee-for-service schedules were based on the charges submitted by physicians.[14] That is, as the distribution of charges shifted up, so did the fee schedules and, thus, physician reimbursements increased.

36. To counteract the rising medical costs due to these incentives under indemnity insurance plans, insurers began using different methods to provide health insurance for their members. In particular, the private sector entities began offering managed care plans. This involved the insurers shopping for health care on behalf of their members by constructing contracted provider networks and encouraging or, often, requiring members to use only providers in these networks. These contracted payment arrangements were typically less expensive than what consumers and third-party payers would pay under indemnity coverage. Likewise, the federal government shifted to diagnosis-related group (DRG) reimbursement method for hospitals and, later, to the Resource-Based Relative Value Scale (RBRVS) reimbursement method for physicians.[15] Importantly, the RBRVS system sets reimbursements based on the expected level of resources used to produce the care rather than on the profiles of charges that

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[13] D. Dranove, *The Economic Evolution of American Health Care* (Princeton: Princeton University Press, 2000), Chapter 4, p. 73. More generally, the change in health care utilization caused by having insurance coverage that lowers the price of health care at the point of service is called "moral hazard." [A.J. Culyer and J. P. Newhouse, eds., *Handbook of Health Economics*, Vol. 1A (Elsevier Science, 2000), Chapter 8, p. 413]

[14] U.S. Congress, Office of Technology Assessment, *Payment for Physician Services: Strategies for Medicare*, OTA-H-294 (Washington, D.C.: U.S. Government Printing Office, February 1986).

[15] American Medical Association, *Medicare RBRVS: The Physicians' Guide* (2002), Chapter 1. At its inception in the 1960s, Medicare reimbursed physicians on a fee-for-service basis, using a system of customary, prevailing, and reasonable (CPR) charges, similar to the UCR systems already in wide use by private insurers. Like other UCR-type systems, Medicare's CPR system was artificially inflationary, because it gave providers little incentive to be concerned with the efficient delivery of services. Moreover, the CPR system encouraged physicians to raise their billed charges to Medicare beneficiaries since these higher charges would be built into both their customary and the prevailing profiles. [U.S. Congress, Office of Technology Assessment, *Payment for Physician Services: Strategies for Medicare*, OTA-H-294 (Washington, D.C.: U.S. Government Printing Office, February 1986)]

physicians submitted. The RBRVS system has been adopted by many non-Medicare insurers as well.[16]

37. Today, about 87 percent of Americans with commercial health care coverage obtain their coverage through an employer.[17] Almost this entire population is covered by some form of managed care, whether an HMO, a PPO, or a POS plan. This is a large change from the past. As recently as 1993, about 46 percent were covered by indemnity insurance plans. By 2009, indemnity plans covered only about 1 percent of this population.[18] [See Exhibit 3.] This enormous shift occurred due to a widespread need for health care cost containment, in large part, encouraged by inefficient and artificially inflationary methods of provider reimbursement. As evidenced by the widespread drive to control medical costs by all types of payers (including federal government and countless companies that are not alleged to be conspirators), no conspiracy is necessary to have an incentive to control medical costs.

38. The different types of managed care plans vary on the amount of out-of-network benefits that they offer. The most popular types of managed care plans, PPO and POS plans, include a broad network and out-of-network benefits, and are generally more expensive as a result.[19] HMO plans generally do not include out-of-network benefits.[20] If a PPO or POS member uses an out-of-network provider, the plan will generally pay a portion of the provider's billed charges, possibly subject to a separate deductible or coinsurance rate. However, unlike the case of an in-network provider, the member may also be responsible for payment beyond their usual deductible and coinsurance amount, depending on whether the provider elects to "balance bill" the member. Typically, in reimbursing the member for his/her use of an out-of-network

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[16] L.A. McCormack and R.T. Burge, "Diffusion of Medicare's RBRVS and Related Physician Payment Policies," *Health Care Financing Review*, Vol. 16, No. 2, (Winter 1994), pp. 159-173.

[17] U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, Table HIA-4 (1999-2009) (available at http://www.census.gov/hhes/www/data/historical/index.html).

[18] The Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits - 2010 Annual Survey* (2010), p. 66.

[19] The primary reason that PPO plans are more expensive than HMO plans is because they offer broader provider networks. They are also typically more expensive than POS plans for this same reason. That is, most POS plans are based on HMO networks.

[20] This is also the case for Aetna's health plans. [Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, ¶¶ 14-17; Declaration of Merry Noss (Manager of Product Management and Development in Aetna's Marketing, Product, and Communications Department), June 29, 2010, ¶ 3]

provider, a health plan will set an "allowed amount" at the lesser of either (1) the provider's billed charges or (2) an amount that is determined by the insurer and/or the employer to be a reasonable payment level for the services provided.[21] The member is responsible for the deductible and coinsurance portion of the allowed amount plus any balance bill above the allowed amount, and the health plan pays the remainder of the allowed amount.[22]

39. Most fee-for-service claims are for in-network services. For example, almost 90 percent of Aetna's non-HMO claims in 2008 were paid under in-network participation agreements.[23] In-network services are typically paid at contracted, agreed-on prices that both insurers and providers find acceptable, and represent market-based reimbursement levels. But not all providers are on contract with every health plan and subscribers sometimes buy health care coverage for out-of-network services. Insurers must figure out a reasonable way to reimburse providers with whom they have no contracts. They cannot just accept and pay full billed charges from these out-of-network providers. In the upper deciles of most charges distributions, there is a dramatic increase in the charge amounts. This can be due to aggressive billing practices, coding errors, or even simple typographical errors. More generally, full billed charges have become list prices that are seldom paid, rather than actual transaction prices. Providers are typically reimbursed at levels far below their billed charges. [See Exhibits 4 and 5.]

40. Even some of the named plaintiffs agree that the payers cannot just accept full billed charges. For example, Dr. Leonard Nelson of the American Medical Association (AMA) acknowledged that setting the allowed amount at the 80th percentile of charges is an appropriate way to protect payers from "price-gouging" providers.[24] Likewise, Ms. Michelle Cooper, who is a named subscriber plaintiff, recognized that an individual provider's billed charge cannot dictate

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[21] Sometimes this reasonable payment amount is based on a UCR benchmark. Sometimes it is based on a different benchmark, such as a multiple of the Medicare RBRVS payment level or a specific fee schedule derived by other methods or a wrap network contract through a rental network.

[22] Members' coinsurance or copayment amounts for out-of-network benefits are often set at higher levels than for in-network services.

[23] Declaration of James LaPorta (Medical Economics Manager in Health Care Management for Aetna), July 1, 2010, ¶¶ 3 and 12.

[24] Deposition of Leonard Nelson (Lawyer in Charge of the Litigation for the AMA), June 22, 2010, pp. 141-144.

reimbursement levels, given that the price charged by any individual provider is "a unilateral number."[25] Further, Dr. Frank Tonrey, who is a named plaintiff provider, testified that "if a physician could simply bill any amount . . . and receive that amount in insurance coverage, insurers could not continue to provide out-of-network benefits."[26] Even Dr. Rausser acknowledged in his class cert deposition than an out-of-network provider's billed charge may not reflect the price at which he or she is willing to provide services.[27] Likewise, Dr. Siskin has acknowledged that a provider's charge might reflect a fraudulent charge or may simply be erroneous.[28] In any of these circumstances, there is no economic basis to justify the payment of full billed charges.

41. Moreover, billed charges are rates that can be set arbitrarily, since these are rates that are generally not paid by health plans or other payers and are not subject to any external market constraints. They are not prices that reflect a meeting-of-the-minds between a willing buyer and a willing seller. For example, these providers set their prices based on their own specific reasoning:

- Brian Mullins, P.T., charges 60 percent more than his former employer for the same procedure ($64 as opposed to $40). He explains that "[w]hen you are in offices that run busier and higher volumes, there are more distractions. Then you take away from the patient. I run a very low volume office, and I don't get distracted from the patient. That's a higher quality."[29]

- Dr. Kavali believes her "fees are fair because it's what the market will bear, which isn't the major reason. But my expertise, skill, location, demand from patients, cost of living, all factors into how I set my fees and that's why I think my rate is fair." However, she conceded that she does not actually collect her full billed charges on most breast reduction surgeries. When she doubled her office visit fee in 2007, she did so without any analysis of her costs or change in how she provides office visits.[30]

- Dr. Antell does not even maintain a written fee schedule. Instead, he varies the amount he charges for each CPT code depending on a number of factors, including complexity,

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[25] Deposition of Michelle Cooper (Named Plaintiff Subscriber), January 19, 2010, p. 50.

[26] Deposition of Frank G. Tonrey, M.D. (Anesthesiologist), February 22, 2010, pp. 146-147.

[27] Deposition of Gordon Rausser, May 21, 2010, pp. 357-362.

[28] Deposition of Bernard Siskin, May 13, 2010, pp. 233 and 315-316.

[29] Deposition of Brian Mullins (Physical Therapist), February 22, 2010, pp. 92-98.

[30] Deposition of Carmen M. Kavali, M.D. (Plastic Surgeon), February 12, 2010, pp. 157 and 160-161.

location, emergency status, extent of postoperative care, and how the actual wound looks. He has lowered some elective fees over time, but not fees for medically necessary procedures that are covered by health plans. He also asserts that there is "no upper limit" at which a charge level for breast reduction surgery would be unreasonable.[31]

- Dr. Tonrey increased his charge levels 5.3 percent in 2005, 10 percent in 2007 and another 4.6 percent in 2010. Dr. Tonrey sets his own rates without input from anyone, except his office manager who prompts him to increase his charge levels periodically.[32] He considers reasonable to be what the market will bear, so he believes a rate is reasonable if patients do not complain.[33]

- Dr. Schorr generally increases his fees at the same rate as his costs increase. He does not rely on what other endocrinologists charge or consultants' advice. He further stated that "depending on the economy, depending on how I feel with patients and how people are doing, I will set these fees."[34]

As another example, the Texas Medical Association recommended on its website that physicians should "analyze and update [their] fees annually to make sure they are higher than insurance allowables. Remember, insurers typically will pay you either their allowable or your fee – whichever is lower. By charging less than the allowable, you are leaving money on the table."[35] This advice, of course, indicates the arbitrariness of the process and has nothing to do with external market constraints or competitive benchmark prices.

B. The Payers Use Many Different Methods and Different Data Sources to Pay for Out-of-Network Services

42. The Amended Class Action Complaint suggests that the Ingenix databases are the only approach that the payers use to reimburse for out-of-network services. However, the Ingenix databases represent only one method of reimbursing for out-of-network services. Importantly, payers generally use a number of other methods and data sources as well, including

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[31] Deposition of Dr. Darrick Antell (Plastic Surgeon), March 9, 2010, pp. 186 and 257-262.

[32] "Well, Ms. Mitchell wants me to raise them periodically. I tell her I think this is what we can bear. Just, you know, I'm fine with this, and it's her job as an office manager to try to, you know, make things better for everybody. I take her advice. I listen to her, and I make my decisions." [Deposition of Frank G. Tonrey, M.D. (Anesthesiologist), February 22, 2010, pp. 108-109 and 207-208]

[33] Deposition of Frank G. Tonrey, M.D. (Anesthesiologist), February 22, 2010, pp. 125 and 127-128.

[34] Deposition of Alan B. Schorr, M.D. (Endocrinologist), March 12, 2010, pp. 111-113.

[35] Texas Medical Association document titled "Don't Lose Revenue With an Outdated Fee Schedule. [https://www.texmed.org/Template.aspx?id=2476 (accessed July 19, 2010)]

(1) wrap networks, (2) bill negotiations, (3) Medicare-based fee schedules, (4) other fee schedules, and (5) databases compiled by other entities.[36]

43. Wrap networks represent rental networks (such as MultiPlan/Viant and First Health) that the payers have contracted with to fill the holes in their provider networks. Even if a provider is out-of-network with the payer's network, the provider may be in-network with the wrap network owned by another firm. This allows the payer to reimburse the out-of-network provider at the wrap network's contracted rate. Likewise, bill negotiations represent ad hoc negotiations between the payers and the out-of-network providers before or after the services are rendered. These negotiations often result in allowed amounts that are much less than the billed amounts. In addition, Medicare-based fee schedules are based on the payers setting the out-of-network services at some percentage of the Medicare fee schedule. Dr. Cross of Aetna testified that most physicians will accept 125 percent of the Medicare fee schedule.[37] Further, other fee schedules represent customized fee schedules like the ones that Aetna used for Verizon or the Texas Teachers Retirement System.[38] Finally, other entities, such as CMS, compile and sell charge data. I will have more to say about this below.

44. Moreover, the use of these other methods of reimbursing for out-of-network services can be substantial. For example, only 3 of WellPoint's 14 Blue Cross Blue Shield companies use the Ingenix databases to reimburse out-of-network claims and, one of those three companies (Blue Cross of California), did not begin to use the Ingenix databases until 2008.[39] In addition, the number of out-of-network claims that Aetna paid using some method other than the

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[36] See, e.g., Declaration of James LaPorta (Medical Economics Manager in Health Care Management for Aetna), July 1, 2010, ¶¶ 13-16; Declaration of Staci Delorenzo (Senior IT Systems Analysis Consultant at United), July 2, 2010, ¶ 6; INGENIXMDL000540917; Texas Department of Insurance, *Report of the Health Network Adequacy Advisory Committee: Health Benefit Plan Provider Contracting Survey Results*, (April 2009), pp. 19-21; Second Consolidated Amended Complaint – *In re WellPoint, Inc. Out-of-Network "UCR" Rates Litigation*, MDL 2074, ¶¶ 16 and 180-184; and Declaration of David Singer, August 6, 2010, Exhibits A and D. The Texas Department of Insurance surveyed 55 carriers and found that 26 used data provided by Ingenix and 29 used other vendors, including Captiva which offers a product similar to Ingenix.

[37] Declaration of James Cross, M.D. (Head of National Medical Policy and Operations for Aetna), June 30, 2010, ¶¶ 23, 26, 27, and 29-32.

[38] Declaration of James LaPorta (Medical Economics Manager in Health Care Management for Aetna), July 1, 2010, ¶¶ 16.

[39] Declaration of David Singer, *In re WellPoint, Inc. Out-of-Network "UCR" Rates Litigation*, MDL 2074, August 6, 2010, Exhibits A and D.

Ingenix databases ranged from 12.9 to 21.9 percent during the 2002 through 2008 period.[40] Finally, CIGNA paid more than 92.5 percent of its out-of-network medical and surgical claims between 1998 and 2008 at full billed charges or by using methods other than the Ingenix databases.[41]

45. As mentioned above, plaintiffs claim that the goal of the alleged conspiracy was to systematically under-reimburse subscribers for out-of-network healthcare services. This means that, besides having to conspire on all of these other methods of paying for out-of-network services, the alleged conspirators would also have had to conspire on all of the other factors that determine how much the subscribers are reimbursed for those services, including the deductible, coinsurance, copayment, and annual maximum amounts. These other factors can have a large impact on how much consumers utilize and have to pay for the out-of-network services.

46. For instance, in 2009 Amgen determined that its members had high out-of-network utilization (particularly at ambulatory surgical centers) that was driving up its health care costs. Amgen requested suggestions from Aetna during the plan renewal process to address these issues. Amgen reviewed these suggestions with its benefits consultant, Towers Watson, and decided to change a number of plan terms. The plan changes specific to out-of-network reimbursements included: (1) shift from the 90th to the 80th percentile of Ingenix for its UCR schedule; (2) increase in the out-of-network deductible; (3) 33 percent increase in out-of-pocket maximum for out-of-network services; (4) additional separate $150 copay for out-of-network emergency room visits; (5) a separate $250 copay for services provided at ambulatory surgical centers and coinsurance increased from 30 percent to 50 percent for these services.[42]

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[40] Declaration of James LaPorta (Medical Economics Manager in Health Care Management for Aetna), July 1, 2010, Exhibits B-H. Mr. LaPorta's analysis covered the 2001 to 2008 period. However, I have not used his results for 2001 since counsel informed me that there could be a problem with the data for that year due to Aetna changing its computer system. His percentage for 2001 equaled 68.1 percent.

[41] Responsive Class Certification Expert Report of Monica G. Noether, Ph.D., dated May 28, 2010 (hereafter "Noether Class Cert Report"), ¶¶ 10, 36, and 248-249. According to Dr. Noether, the other methods include (1) the use of a wrap network, (2) the use of bill negotiations, and (3) the use of differing methodologies for calculating the maximum reimbursable amounts, including the use of a Medicare-based fee schedule and the use of CIGNA-proprietary methodology. [Noether Class Cert Report, ¶ 248]

[42] Declaration of Carmen Barton (Senior Account Manager in Aetna's National Accounts Group), June 29, 2010, ¶¶ 18-20.

47. A similar request, but involving United, is found in New York University's inquiry about switching from a Medicare-based fee schedule to the R&C methodology for reimbursing for out-of-network services. Specifically, United had been reimbursing NYU's claims based on 110 percent of the Medicare fee schedule and NYU wanted to find out what percentile this was equivalent to based on the R&C methodology (e.g., the 60th percentile) and what the cost consequences would be if NYU moved to a higher percentile (e.g., the 80th percentile or 90th percentile).[43]

C. The Payers Do Not Always Use the 80th Percentile

48. With Aetna and others, employers have a high degree of flexibility in plan design for fully-insured plans and the opportunity to entirely customize their plans for a self-insured plan. For both fully-insured and self-funded health plans, employers may choose to customize the methodology used to calculate the out-of-network reimbursement rate: "Aetna typically agrees to administer an employer's desired UCR methodology, as long as Aetna has systems capability and, in the case of insured plans, state filing support for such a selection."[44] Although Aetna sets the out-of-network threshold at the 80th percentile for many employers, other employers choose higher or lower percentiles or even full billed charges.[45] Likewise, United does not use the same out-of-network threshold for all of its employers. "[O]ne benefit plan may use the 70th percentile of the PHCS database, whereas another benefit plan may use the 90th percentile of the PHCS database for determining OON reimbursements."[46]

49. Both fully-insured and self-insured plans set their threshold percentiles at a variety of levels, depending on their needs. For example,

- Hopkins Meat Packing, a fully-insured group, set its out-of-network percentile threshold in 2003 as "the 75th percentile of the charges made for a service or supply by providers in the geographic area where it is furnished."[47]

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[43] UHGMDL000077785-77803.

[44] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, ¶ 47.

[45] *Ibid.*

[46] Declaration of Staci Delorenzo (Senior IT Systems Analysis Consultant at United), July 2, 2010, ¶ 4.

[47] Declaration of Merry Noss (Manager of Product Management and Development in Aetna's Marketing, Product, and Communications Department), June 29, 2010, ¶ 15 and Exhibit 4.

- Kraft Foods North America, Inc. chose the 80th percentile as the out-of-network threshold for a self-funded health plan it offered in 2004.[48]
- ExxonMobil and the Rural/Metro Corporation both chose the 90th percentile as a threshold for the self-funded PPO plans that they offered in 2005 and 2007, respectively.[49]
- Alaska Airlines selected the 85th percentile as its out-of-network threshold for out-of-network self-funded coverage in 2006.[50]
- Brown & Brown of Garden City, a fully-insured group, requested and received approval to offer their employees a health plan with a 75th percentile UCR threshold in 2007.[51]
- Crystal Windows and Doors, a fully-insured group, changed its UCR threshold to the 70th percentile in 2007.[52]
- Dresdner Kleinwort Wasserstein, a fully-insured group, requested and received approval to increase its out-of-network percentile threshold from the 80th to the 90th percentile.[53]
- The Rural/Metro Corporation chose the 90th percentile as its threshold for a self-funded health plan offered in 2007.[54]
- Amgen also chose the 90th percentile as its out-of-network threshold prior to 2009.[55]

In addition, an April 2009 study submitted by the Texas Department of Insurance found that the threshold percentiles ranged from the 60th percentile to the 85th percentile. For instance,

- One carrier stated "[p]ayment is based on a percentage of billed charges (typically in the 70th to 80th percentile) based on data provided by Ingenix."[56]
- Another carrier stated "[c]laims are paid at either 70th or 85th percentile of HIAA allowances."[57]

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48 Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, Exhibit 2.

49 *Ibid.*

50 *Ibid.*

51 AET-03543470-471.

52 AET-03543467-468.

53 AET-03543440-441.

54 Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, Exhibit 2.

55 Declaration of Carmen Barton (Senior Account Manager in Aetna's National Accounts Group), June 29, 2010, ¶¶ 18-20.

56 Texas Department of Insurance, *Report of the Health Network Adequacy Advisory Committee: Health Benefit Plan Provider Contracting Survey Results* (April 2009), p. 20.

57 *Ibid.*

- Finally, a third carrier stated "[p]ayments calculated at the 60th percentile of Ingenix's Prevailing Healthcare Charges System."[58]

Moreover, a 2006 e-mail shows that United's plans have used a variety of threshold percentiles ranging from the 60th and 70th percentile all of the way to the 100th percentile.[59] Additionally, some sponsors of United's plans have chosen not to use a specific percentile at all, but rather have opted for United to apply a multiple of a percentile (such as 1.09 times the 60th percentile), which gives the plan sponsors even more choices.[60]

50. In fact, some employers and their benefits consultants closely track the extent of out-of-network use. If they find it is too high, employers may change the plan's incentives to further encourage use of in-network providers (as Amgen did) or may even ask that the health plan approach some frequently used out-of-network providers to negotiate an acceptable in-network rate. Chris Saulsberry, the Benefits Manager for Owens Corning, illustrates this concern at Owens Corning:

> "With the help of its consultants, Owens Corning designs its self-insured plans and sets the benefit levels to be provided. Owens Corning tries to encourage its plan members to seek care from in-network providers, due to the disproportionately high cost of out-of-network services. … Managing out-of-network expenses is a significant priority for Owens Corning since it is financially responsible for the payment of all covered benefits under its self-funded plan."[61]

51. Many employers, even if they eventually choose to keep the same percentile threshold, evaluate the claims cost of changing the percentile or even the methodology by which out-of-network providers are paid. Aetna provides employers with the incremental costs of adjusting these payment methodologies on a regular basis. Aetna's underwriting department has a "financial rating factor worksheet" that "estimates the impact on medical claims costs of changing a plan from one percentile to another percentile of Ingenix. For example, if an employer chose to shift from the 80th to the 90th percentile for a Traditional Choice plan, the Aetna worksheet from December of 2009 would have predicted a 0.70 percent increase in the

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[58] *Ibid.*, p. 21.

[59] UHGMDL000077787.

[60] *Ibid.*

[61] Declaration of Chris Saulsberry (Benefits Manager for Owens Corning), June 29, 2010, ¶ 9.

employer's medical costs. Aetna also develops customized analyses of expected cost changes for the specifics of a particular plan.[62] Like other types of benefit choices (e.g., drug copays, deductible amounts, office visit copay), employers and, sometimes, employees can pick the type of out-of-network benefits that best suits their tradeoff for greater choice versus higher premiums or self-funded medical costs. For instance, Aetna recently ran an analysis for a customer that showed, "if Aetna's out-of-network payments in 2009 had been higher by 5% across the board, Aetna would have increased the customer's premiums per-member per-month by .58%. For individual employees enrolled in the plan, this would mean an increase in annual premiums for 2010 of $46.30."[63]

52. Even if an employer decides not to change its percentile threshold, it can still reduce its out-of-network costs by changing other aspects of its plan design, including the deductible, coinsurance, copayment, and annual maximum amounts or the size of its provider network, in a manner similar to what Amgen decided to do. By increasing the deductible, coinsurance, and copayment amounts or decreasing the annual maximum amount, this decreases the employer's out-of-network costs. Also, by expanding the size of its provider network, this causes more employees to use in-network providers, which decreases the employer's out-of-network costs. There are more adjustments possible than just changing percentile thresholds.

53. Employers, of course, face a simple tradeoff between providing valuable out-of-network benefits that will attract and retain good workers and avoiding excessive medical costs. This tradeoff may explain why many plans choose the 80th percentile or thereabouts. For example, Exhibit 6A shows the billed charges for an established patient office visit (CPT 99213) in the Levittown/Brentwood/Hampton Bays area (geozip 117). I generated the distribution using the contributor data for approximately March 2007 through February 2008, which are the charge data that Ingenix received from the payers and used to create the PHCS and MDR databases. The exhibit shows that the distribution steadily but gradually increases until around the 70th percentile, basically flattens out between the 70th to 90th percentile, and then dramatically increases after the 90th percentile. Thus, this distribution indicates why the plans and employers

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[62] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, ¶¶ 49-52 and Exhibit 20.

[63] Declaration of William R. Jones (Aetna's Head Actuary for Fully-Insured Plans in the Northeast Region), June 30, 2010, ¶¶ 8-9.

may gravitate to the 80th percentile—it results in making a large number of providers available to members on an out-of-network basis but avoids the highest cost providers that would quickly raise medical costs or premiums for out-of-network services. The distributions for many other high-frequency CPT-geozip combinations show similar results. [See Exhibits 6B-6J.]

D. Many Different Entities Licensed the PHCS and MDR Databases

54. Ingenix acquired the MDR database in 1997 from Medicode and the PHCS database in 1998 from the Health Insurance Association of America (HIAA).[64] Ingenix compiles the databases and licenses them to others. It does not determine the particular percentile a licensee will use.[65] A review of the 2004 and 2009 Ingenix customer lists show that many different entities licensed those databases.[66] For example, many of the largest insurers licensed those databases, including Anthem, United, Aetna, CIGNA, Health Net, Coventry, Humana, Kaiser, and a number of BCBS plans. Likewise, the customer lists show that a number of third-party administrators licensed the databases, including Associated Third Party Administrators, Costal TPA, HealthFirst TPA, and Keenan Health Care TPA. Further, the customer lists show that a number of rental networks licensed the databases, including MultiPlan and Evolutions Healthcare Systems.

55. The Ingenix customer lists also show that a number of self-insured employers, hospitals, physician groups, and other providers licensed those databases. The self-insured employers included Ford Motor Company, Smithfield Foods, Inc. and Wells Fargo. Likewise, the hospitals included Beloit Memorial Hospital, Duke University Medical Center, IASIS Healthcare, and Scott & White. In addition, the physician groups included Dreyer Medical Clinic, Marshfield Clinic, Quincy Medical Group, and West Texas Medical Associates. Finally, the other providers included Alamo Heights Surgery Center and Peoria Day Surgery Center.

56. In addition to licensing the Ingenix databases, many of these entities also contributed charge data to Ingenix. For example, in 2004 and 2005, Ingenix told various state

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[64] Deposition of Carla Gee (Vice President of Pricing Solutions for Ingenix), March 17, 2010, pp. 23 and 27.

[65] See, e.g., AET-00846175 and AET-00853921.

[66] INGENIXMDL000072229-689 and INGENIXMDL001091205-385.

regulators that it received charge data from nearly 200 payers.[67] Likewise, a review of the contributor data for 2006 through 2008 show that Ingenix received charge data from 156 entities, including health insurers, third-party administrators, and a few self-insured employers and providers.[68] Finally, Dr. Rausser stated that the "Ingenix data is drawn from between 100 to 250 contributors."[69]

57. Although the available record does not indicate why all of the entities licensed the Ingenix databases, it does indicate why Aetna started to use them. In particular, Dr. Cross stated in his declaration that Aetna switched to using the PHCS database in 1996 since it was more complete and robust than Aetna's own charge data.[70] At the time Aetna began using the PHCS database, HIAA still owned it, not Ingenix.[71]

E. Most Providers Treat a Sizeable Number of Medicare Patients and Accept Medicare Reimbursement

58. The 2008 Health Tracking Physician Survey estimates that 60 percent of physicians receive one fourth or more of their practice revenue from Medicare patients.[72] As mentioned above, Medicare uses the RBRVS reimbursement system to pay physicians for treating its patients. This system is based on a rigorous study of the relative costs of providing various types of medical services in different localities.[73] These costs include the physician's (1) work expenses, (2) practice expenses, and (3) professional liability insurance.[74] There is also a geographic cost factor applied to these expenses. Medicare reimburses the physicians in proportion with this relative value calculation.

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[67] INGENIXMDL000736717-827.

[68] INGENIXMDL000756673. See also INGENIXMDL000929773-75.

[69] Expert Witness Report of Gordon Rausser, Ph.D., August 9, 2010 (hereafter "Rausser Merits Report"), ¶ 87.

[70] Declaration of James Cross, M.D. (Head of National Medical Policy and Operations for Aetna), June 30, 2010, ¶¶ 17, 19, and 21.

[71] Deposition of Carla Gee (Vice President of Pricing Solutions for Ingenix), March 17, 2010, p. 27.

[72] Center for Studying Health Systems Change, "HSC 2008 Health Tracking Physician Survey," available on the Inter-University Consortium for Political and Social Research website at http://www.icpsr.umich.edu.

[73] American Medical Association, *Medicare RBRVS: The Physicians' Guide* (2003), Chapter 1, pp. 6-9.

[74] *Ibid.*, Chapter 8, pp. 59-60.

59. Although most providers probably consider Medicare to be at the low end of reasonable rates, they have signaled their broad acceptance of these rates by their participation in the program. Based on the high levels of participation, the Medicare Payment Advisory Commission (MedPAC) has found that Medicare payments for physician services were adequate during the 2002 to 2008 period.[75] For example, in 2008, 86 percent of physicians accepted new Medicare patients.[76] While there are many Medicare patients needing care, at least for the traditional fee-for-service Medicare patients, there is no channeling of patients and no commitment that a physician will receive a relatively high proportion of Medicare patients just because he/she participates as a Medicare provider. Because the RBRVS system is designed to measure the resource costs of providing different types of care, many insurers base their contracted amounts on the Medicare benchmark.[77] Based on published data and as confirmed by my experience, managed care contracted rates for physicians usually are in the range of 120 to 130 percent of Medicare.[78] These are rates agreed to by willing buyers and willing sellers in a physician services market as reflected in the Medicare participation agreements. In addition, other evidence suggests that non-contracted rates range from 110 to 140 percent of Medicare.[79]

F. CPT Codes Have Evolved Over Time and Control for a Wide Variety of Factors

60. Physicians and many other providers bill for their services using the Current Procedural Terminology (CPT) codes. These are five digit codes that indicate the services and procedures that the providers have rendered and, thus, are billing for. For example, the CPT

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[75] MedPAC, *Report to Congress: Medicare Payment Policy* (March 2003-2009).

[76] Center for Studying Health Systems Change, "HSC 2008 Health Tracking Physician Survey," available on the Inter-University Consortium for Political and Social Research website at http://www.icpsr.umich.edu.

[77] L.A. McCormack and R.T. Burge, "Diffusion of Medicare's RBRVS and Related Physician Payment Policies," *Health Care Financing Review* Vol. 16, No. 2, (Winter 1994), pp. 159-173.

[78] For example, the American Medical Association conducted a survey of private health insurers in 2006. Of those that had adopted an RBRVS reimbursement structure, the average RBRVS conversion factor for physician services equaled 124 percent of that year's Medicare conversion factor. [American Medical Association, *Medicare RBRVS: The Physicians' Guide* (2010), Chapter 13, p. 147]

[79] Declaration of James Cross, M.D. (Head of National Medical Policy and Operations for Aetna), June 30, 2010, ¶¶ 23 and 25-27 and United document titled "Out-of-Network Affordability Programs, Tier 3: Maximum Non-Network Reimbursement Program (MNRP)" dated October 2008. [http://www.consultant.uhc.com/assets/images/content/MNRP_sellshet_2948_final.pdf]

codes for new patient office visits are 99201-99205.[80] They range in complexity from a simple, problem focused office visit (99201) to a much more time consuming, high complexity office visit (99205). Along with the CPT codes, the providers will sometimes include two digit modifier codes. The modifier codes indicate that the service or procedure was altered in some way. For instance, modifier code 26 indicates that the service or procedure involved the professional component only and does not include a claim for the technical component, such as the charge for using an X-ray machine or other specialized equipment. Another modifier code, 80, indicates that an assistant surgeon was used by the main surgeon during the procedure.[81]

61. The CPT codes and modifiers are maintained by the American Medical Association (AMA) and have been revised periodically. Some of the revisions—such as the 1992 revision to the evaluation and management (E&M) codes—have been done to make it easier for the providers to indicate the complexity of the services and procedures. For instance, for an office visit, the 1992 revision increased the number of E&M code complexity levels from 3 codes to 5 codes.[82] This made it easier to more accurately specify the complexity of the office visit. The revision also added initial and follow-up consultation E&M codes as additional classifications.[83] Finally, the revision incorporated the site of service to the E&M codes by employing the five site groups already used by CPT for other purposes.[84]

62. Although many CPT codes are used by providers with different specialties, some CPT codes indicate services or procedures that can only be performed by certain types of specialists. For example,

- Retinal tear: 67101 - Repair of retinal detachment, 1 or more sessions; cryotherapy or diathermy, with or without draining of subretinal fluid (ophthalmologist);

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[80] American Medical Association, *CPT-2010 Physicians' Current Procedural Terminology*, (2009), pp. 11-12.

[81] *Ibid.*, p. 531. There are many other types of modifier codes; the *CPT-2010* manual lists 83 in total.

[82] American Medical Association, *CPT-1993 Physicians' Current Procedural Terminology* (1992), p. iii. The 1992 revisions were a joint effort involving both the Physician Payment Review Commission and the AMA. [Physician Payment Review Commission, *Annual Report to Congress* (1989), p. xix; Physician Payment Review Commission, *Annual Report to Congress* (March 1988), p. 95]

[83] Physician Payment Review Commission, *Annual Report to Congress* (March 1991), pp. 157-60.

[84] *Ibid.*, p. 160.

- Open heart surgery: 33517- Coronary artery bypass, using venous graft(s) and arterial graft(s); single vein graft (cardiac surgeon);
- C-section: 59620 Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery (OB/GYN);
- Pancreas transplant: 48550 - Donor pancreatectomy (including cold preservation), with or without duodenal segment for transplantation (transplant surgeon);
- Craniotomy: 61304 - Craniectomy or craniotomy, exploratory; supratentorial (neurosurgeon).

In addition, even with E&M codes, there are likely to be differences according to specialty: "Physicians in different specialties do not provide the same mix of [E&M] services. Some specialists provide primarily short established patient visits. Others provide longer visits or a greater proportion of consultations or hospitals visits. With the refined coding system, each specialist's total [E&M] payments would be different, reflecting differences in the time and effort involved."[85]

63. The CPT codes can control for even more factors through the use of modifiers and multiple modifiers can be used with each CPT code.[86] The modifiers can indicate many things, including (1) a service or procedure was increased or decreased, (2) only part of a service or procedure was performed, (3) another related service/procedure was performed at the same time, (4) another non-related service or procedure was performed at the same time, (5) a service or procedure was provided more than once, (6) the credentials/training of the provider, and (7) unusual events occurred. Although the Ingenix databases generally do not account for modifiers that impact reimbursement levels, Aetna did consider modifiers when adjudicating claims based on the Ingenix databases.[87]

G. Out-of-Network Providers Can Always Balance Bill

64. In evaluating claims data, one needs to make a distinction between the billed amount, the allowed amount, and the paid amount. The billed amount represents the amount that

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[85] *Ibid.*, pp. 150-151. If a physician provides other services during the office visit, they are typically billed separately.

[86] American Medical Association, *CPT-2010 Physicians' Current Procedural Terminology*, 2009, p. 531.

[87] Expert Report of Dr. Andrew S. Joskow, dated April 6, 2010, (hereafter "Joskow Class Cert Report"), ¶ 25.

a provider bills for each CPT performed on the patient. It is also referred to as the charge amount and represents the provider's list price. The allowed amount represents the amount that a payer determines the provider should receive for treating the patient. The allowed amount may be set by some form of contract, some post-service negotiation, fixed fee schedules from a governmental or private payer or some payment method like the UCR system. The allowed amount is typically paid by one or more of several different sources, including one or more commercial insurers, a governmental payer, a self-insured employer, and/or the patient. In the case of out-of-network providers, the allowed amount is either equal to or less than the billed amount. Finally, the paid amount represents the amount that the insurer or self-insured employer paid. It is generally less than the allowed amount since the patient is often responsible for making a copayment or deductible payment to fully cover the allowed amount.[88]

65. In-network providers sign contracts with the payers that specify many terms, including that they will accept the allowed amount as payment in full and will not balance bill the patients. Providers typically join these networks since they expect that they will treat additional patients by doing so, since patients generally pay less if they use in-network providers. The incremental volume depends on how narrow or broad the network is. A broad network, as has been popular since the early 2000s, implies that the incremental volume may not be great since most rival providers are also in the network. Out-of-network providers, on the other hand, have not signed any contracts with the payers and can balance bill the patients for any charge amount in excess of the allowed amount.[89] The ability to balance bill means that the out-of-network providers can always seek to collect their full billed amount no matter what a given insurer determines to be a reasonable reimbursement through a UCR system or a Medicare-based system.

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[88] Aetna does pay some out-of-network providers (non-par preferred) on a different basis that leaves subscribers to pay the copayment only based on in-network rates. For instance, this occurs when a non-participating provider is used when a subscriber goes to a hospital that is otherwise in-network or when an out-of-network provider has been approved for use by a particular patient. In those instances, Aetna usually pays the physician on a percent-of-Medicare basis and takes care of any balance bill, although the physicians normally accept the 125 percent of Medicare amount that Aetna pays. [Declaration of James Cross, M.D. (Head of National Medical Policy and Operations for Aetna), June 30, 2010, ¶¶ 23-32]

[89] Declaration of Merry Noss (Manager of Product Management and Development in Aetna's Marketing, Product, and Communications Department), June 29, 2010, ¶¶ 4-5.

66. Most providers participate in at least some health plans' networks. Even among plans offered by the same insurer, it may be the case that a provider participates in the provider panel for a PPO product, but perhaps not with the panel for an HMO product.

- Mr. Mullins, M.S., P.T., is an in-network provider for Blue Cross Blue Shield, United Healthcare, and TriCare, and accepts assignment for Medicare patients. He is not a participating provider for Aetna.[90]
- Dr. Tonrey accepts Medicare patients. He is also in-network with Blue Cross/Blue Shield of Texas and CIGNA's HMO product. He is not a participating provider for Aetna.[91]
- Dr. Schorr accepts Medicare patients. He was a participating provider for Blue Cross and "independents" for about two years, but has withdrawn his participation from these plans. Although the two facilities where he provides services are in-network facilities for Aetna, he does not participate on Aetna provider panels.[92]
- At one time, Dr. Kavali was a participating provider for many health plans, including Aetna, Blue Cross, United, CIGNA, PHCS, MultiPlan, Coventry and Humana. However she has terminated all of these relationships. She also does not accept Medicare rates.[93]
- Dr. Antell does not participate in any health plan network, not even Medicare. Instead, he generally collects payment upfront from his patients and mails claim documents to his patients to do with as they wish.[94]

Thus, most providers are in-network providers for some plans and out-of-network providers for other plans.

H. The Majority of Employers Offer Their Employees Multiple Health Plans

67. Many employers are sophisticated purchasers of health care coverage. They often partner with benefits consultants and brokers to design, evaluate and even implement their health plans.[95] As Aetna's President of National Accounts explained:

> "In my experience, the vast majority of National Accounts are also represented by a third-party advisor during the negotiation and sale of Aetna's health plans

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[90] Deposition of Brian Mullins (Physical Therapist), February 22, 2010, pp. 124 and 140.

[91] Deposition of Frank G. Tonrey, M.D. (Anesthesiologist), February 22, 2010, pp. 49, 101-102, and 106-107.

[92] Deposition of Alan B. Schorr, M.D. (Endocrinologist), March 12, 2010, pp. 52-53, 60-62, and 122.

[93] Deposition of Carmen M. Kavali, M.D. (Plastic Surgeon), February 12, 2010, pp. 41 and 102-103.

[94] Deposition of Dr. Darrick Antell (Plastic Surgeon), March 9, 2010, pp. 65-67, 88-89, and 101-104.

[95] Declaration of Chris Saulsberry (Benefits Manager for Owens Corning), June 29, 2010, ¶¶ 8-11.

> or administrative services. The advisor may be a large consulting firm that specializes in the design, implementation, and evaluation of health plans – such as Mercer, Hewitt, or Towers Watson.... These benefits firms are established players in the health plans markets. ... Other employers use an independent insurance broker knowledgeable about health plans available in a particular region or market."[96]

68. Employers, especially large employers, also have experienced internal staff whose primary responsibility is the cost-effective management of employees' health benefits. Their staff members, with assistance from outside advisors, regularly evaluate health plan proposals offered by competing health insurers.[97] Competition for employers' business can be a complex multi-stage process, in which all aspects of competing health plan proposals are thoroughly evaluated, especially those of the finalists.[98] This includes an analysis of the expected costs of out-of-network coverage.

69. The competition for employers' business often leads to plan changes. Employers can and will change the terms of their plan or even change their plan administrator or insurer. In 2010, 60 percent of employers offering health benefits had shopped for a new plan or carrier in the prior year. Of these employers, 27 percent switched to a different carrier and 33 percent changed plan type.[99]

70. Finally, over 95 percent of Aetna's commercial health plan members are covered through their employers, not as individuals.[100] Many employers offer their employees several types of health plans with different levels of out-of-network coverage and large employers often offer a choice among several insurers as well. In 2010, 52 percent of covered employees were

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[96] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, ¶ 34.

[97] "By necessity, these employers are sophisticated consumers of health care that have a high degree of expertise in the workings of health plans and the evaluation of the costs and benefits of various plan features. Moreover, plan sponsors often move their health plans to different insurers or administrators in search of improved financial terms or serviced levels." [*Ibid.*, ¶ 32]

[98] *Ibid.*, ¶¶ 32-55.

[99] The Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits - 2010 Annual Survey* (2010), p. 215.

[100] "For the vast majority of Aetna's health benefits plans, Aetna contracts with employers, not individuals. Out of the 15.9 million people currently enrolled in Aetna's commercial health plans, Aetna has direct insurance contracts with only 460,000 individuals. The balance of health plan members are enrolled in employer-sponsored benefits plans." [Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, ¶ 6]

offered more than one type of health plan by their employer.[101] For example, "Lockheed Martin offers multiple POS and PPO plans, and an indemnity plan, all of which include out-of-network coverage, and several HMO plans, which do not."[102] In addition, some employers offer plans from multiple health insurance companies.[103] Thus, many employees have multiple health plans that they can choose from. This may be especially true in the case of a married couple with different employers, each offering multiple plans.

IV. THE ALLEGED CONSPIRACY IS ECONOMICALLY IMPLAUSIBLE

71. Economists generally believe that firms will only join an alleged conspiracy if they think they can earn greater profits from participating in it than they can achieve in the absence of a conspiracy.[104] Further, economists generally believe that an alleged conspiracy can only succeed if the firms have (1) the ability to reach and implement the conspiratorial agreement and (2) the ability to monitor and enforce the conspiratorial agreement once it has been implemented.[105] Finally, economists generally believe that if firms are conspiring, they will be engaging in parallel behavior reflecting the rules of the alleged conspiracy and that these behaviors will conflict in some important way with their own self-interested goals.[106] Otherwise, they could achieve their economic goals by behaving independently—that is, a conspiracy would not be needed.

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[101] The Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits - 2010 Annual Survey* (2010), p. 61.

[102] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, ¶ 15.

[103] *Ibid.*, ¶ 27.

[104] See, e.g., M. Levenstein and V. Suslow, "What Determines Cartel Success," *Journal of Economic Literature* (March 2006); D. Carlton and J. Perloff, *Modern Industrial Organization* 5th ed. (New York: Pearson Addison-Wesley, 2005), Chapter 5; A. Jacquemin and M. Slade, "Cartels, Collusion, and Horizontal Merger," in R. Schmalensee and R. Willig, *Handbook of Industrial Organization* Vol. 1 (Amsterdam: North Holland, 1989); G. Stigler, "A Theory of Oligopoly," *Journal of Political Economy* 72 (1964); L. Pepall, D. Richards, and G. Norman, *Industrial Organization: Contemporary Theory and Practice* 2nd ed. (Mason, OH: Southwestern, 2002), Chapter 7; and J. Tirole, *The Theory of Industrial Organization* (Cambridge, MA: MIT Press, 1988).

[105] *Ibid.*

[106] See, e.g., D. Scheffman and M. Coleman, "Quantitative Analyses of Potential Competitive Effects from a Merger," *George Mason Law Review* Vol. 12, No. 2 (Winter 2003), pp. 319-369.

72. However, even if it is found that the alleged conspirators have engaged in parallel behavior, this is not dispositive for concluding that a conspiracy has taken place.[107] In a competitive market, firms will tend to adopt many of the same "best practices" or risk losing business. Parallel behavior cannot be used to distinguish between competitive and conspiratorial behavior without clear evidence that the observed behaviors in the market are inconsistent with what a competitive market would have otherwise produced.

73. In his class cert deposition, Dr. Rausser acknowledged that he has seen no evidence of a written or verbal conspiratorial agreement among the alleged conspirators.[108] He also acknowledged that he has seen no evidence of communication among the alleged conspirators with respect to a conspiratorial agreement.[109] Thus, his only basis for claiming that an alleged conspiracy has taken place is his belief that the percentiles in the Ingenix databases have been suppressed (which they have not, as I will discuss in more detail below) and his observation that the alleged conspirators have adopted many of the same practices, such as the use of the Ingenix databases. However, as mentioned, adopting many of the same "best" practices is consistent with the independent, self-interests of the alleged conspirators and, as such, is what you would expect to find in the absence of a conspiracy. It is not evidence that a conspiratorial agreement has been reached and implemented. Thus, Dr. Rausser has no economic evidence of a conspiracy and no plausible theory of how his conspiracy would work. He has only a conclusion that the conspiracy has suppressed out-of-network payments based on someone else's (erroneous) finding.

74. Also, as discussed below, Dr. Rausser's reliance on the coordination-of-benefits (COB) process as a monitoring device for the alleged conspiracy is not realistic. There is no evidence that any of the alleged conspirators, including Aetna, ever monitors the percentiles set by others using the COB process.[110] It is simply not necessary. In part, this is because large employers can and do choose the percentile they wish to use. They decide on the appropriate

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[107] See, e.g., G. Werden, "Economic Evidence on the Existence of Collusion: Reconciling Antitrust Law with Oligopoly Theory," *Antitrust Law Journal* 71, No. 3 (2004), pp. 719-800.

[108] Deposition of Gordon Rausser, May 20, 2010, pp. 84 and 241-242.

[109] *Ibid.*, pp. 144-145.

[110] See, e.g., Declaration of Gordon Rausser, Ph.D., August 23, 2010, ¶ 52 ("I have not seen any direct evidence that the COB system was actually used by the conspirators to monitor each others' reimbursements").

balance they want between offering their employees a valuable out-of-network benefit and controlling their insurance premiums and health care costs. There is no need to conspire since the buyers can choose how to manage their out-of-network benefits from virtually any company they buy coverage from. Using the COB process as a monitoring mechanism is unnecessary.

75. Given that there is no evidence of a conspiracy monitoring its members, it is not surprising that there is also no evidence that any user of Ingenix data has ever been disciplined, although it is unclear what they would be disciplined for—not using the Ingenix data, not using a certain percentile threshold, or something else? It is also unclear what "cheating" on the conspiracy would represent. Dr. Rausser says it is acceptable within the alleged conspiracy to use a variety of percentiles, so that cannot be punished, even if detected via the COB process. Even more puzzling, if one alleged conspirator defects to another data source, how can that conspirator be punished by then not selling it the Ingenix data that it has just shown it does not need? In any case, there is no evidence of an alleged member of the conspiracy being punished for cheating by being denied use of the Ingenix data or by any other method, as Dr. Rausser speculates.

76. The basic economic elements of a conspiracy simply are not present and have not been demonstrated by Dr. Rausser. In fact, he admits to their absence. The far simpler explanation is that there is no conspiracy and that each of the alleged conspirators is acting in its own self-interest to balance the costs and benefits of providing out-of-network coverage to its clients or employees.

A. There Are Too Many Alleged Conspirators

77. According to Dr. Rausser, the alleged conspiracy in this case involved Aetna, CIGNA, United, and the many co-conspirators using the Ingenix PHCS and MDR databases to accomplish the suppression of UCR-based reimbursement across the entire healthcare industry in the United States.[111] In his class cert deposition, Dr. Rausser testified that the active participants in the alleged conspiracy consisted of all of the entities who licensed the Ingenix databases, as well as Ingenix.[112] He also stated in his recent merits report that the Ingenix databases had 1,180

[111] Rausser Merits Report, ¶¶ 14-15.

[112] Deposition of Gordon Rausser, May 20, 2010, p. 87.

customers as of January 2005 and that Ingenix had approximately 2,000 payers and intermediaries by December 2009.[113] This means that, during the 2005 through 2009 period, the number of alleged conspirators ranged from 1,180 to approximately 2,000.

78. However, in his most recent declaration, Dr. Rausser sorts these conspirators into some new categories. For instance, he attempts to distinguish several large "active" conspirators from the "effective coordination" accomplished through more passive firms among the conspiracy who simply use the Ingenix data.[114] In fact, it is not clear that these "effective coordinator" firms even know they are part of a conspiracy—which, of course, seems implausible. They are "entities that may not actively be conspiring to lower reimbursements."[115] Moreover, it is unclear where the logical line between active conspirators and "effective coordinators" is to be drawn. Dr. Rausser merely asserts that the defendants are the active conspirators trying to suppress reimbursements. He offers no argument for and no proof of what each active conspirator does that distinguishes it from the passive "effective coordinators." If the active conspirators only include those entities that contributed data to Ingenix, there would still be as many as 250 conspirators, including health insurers, third-party administrators, and a few self-insured employers and providers.[116] Further, even beyond these direct customers and users of Ingenix data, there is a "competitive fringe" that allegedly merely follows the lead of the Ingenix pricing, even though they do not even use the data.[117] Nowhere does Dr. Rausser explain or prove how the methods used by this "competitive fringe" are similar to the Ingenix approach or correlated to it, or when members of the fringe become defectors by not using the Ingenix data or closely correlated data. And, even if there were close correlations among all three groups, Dr. Rausser has not ruled out why these do not simply represent a convergence of buyers on a range of out-of-network rates that reasonably balance their members access to out-of-network providers with the cost of using them. Thus, these distinctions among the many alleged conspirators do not constitute a reasonable definition of a conspiracy to suppress charge

[113] Rausser Merits Report, ¶ 22.

[114] Declaration of Gordon Rausser, Ph.D., August 23, 2010, ¶¶ 30-31.

[115] *Ibid.*, ¶ 31. Equally implausible would be a conspiracy heavily dependent on unknowing third-parties over whom the conspirators have no control.

[116] Rausser Merits Report, ¶ 87.

[117] *Ibid.*, ¶ 32.

data or a reasonable description of its agreements and its mechanisms sufficient to coordinate nearly 2,000 conspirators.

79. One of the principal findings from the economics literature on collusion and cooperative behavior is that an alleged conspiracy is likely to succeed only if it involves a relatively small number of firms.[118] This is true regardless of whether the alleged conspiracy involves the output market (in which insurers compete to sell health care coverage to employers and individuals) or the input market (in which insurers compete by contracting with physicians to provide care to their members).[119] Given the large number of companies that would have had to participate in the alleged conspiracy, plaintiffs' claim that a common, nationwide scheme could have been agreed upon, implemented, monitored, and successfully maintained over eleven-plus years is economically implausible—particularly in an industry that has undergone so many changes over the course of the alleged conspiracy.

80. A much more reasonable explanation for why so many firms signed up with Ingenix is that there is no need to coordinate all these firms when their independent, self-interests lead to the same behaviors. It is logical for these firms to collect charge data, to contribute it for aggregation, and to buy the data for the purposes of setting out-of-network rates and managing the costs of this benefit. It is very costly for more than a few firms to obtain the large amounts of charge data needed to determine UCR rates based on a profile of charges at very local levels. Ingenix (and others before Ingenix, such as HIAA) have brought together larger and larger amounts of charge data that can provide more reliable estimates for more local geographies and for more CPT codes. For example, Aetna ceased relying on its own claims data in 1996 for the simple reason that the much larger PHCS database would be more efficient and reliable for

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[118] See, e.g., M. Levenstein and V. Suslow, "What Determines Cartel Success," *Journal of Economic Literature* (March 2006); D. Carlton and J. Perloff, *Modern Industrial Organization* 5th ed. (New York: Pearson Addison-Wesley, 2005), Chapter 5; A. Jacquemin and M. Slade, "Cartels, Collusion, and Horizontal Merger," in R. Schmalensee and R. Willig, *Handbook of Industrial Organization* Vol. 1 (Amsterdam: North Holland, 1989); G. Stigler, "A Theory of Oligopoly," *Journal of Political Economy* 72 (1964); L. Pepall, D. Richards, and G. Norman, *Industrial Organization: Contemporary Theory and Practice* 2nd ed. (Mason, OH: Southwestern, 2002), Chapter 7; and J. Tirole, *The Theory of Industrial Organization* (Cambridge, MA: MIT Press, 1988).

[119] See, e.g., R. Blair and J. Harrison, *Monopsony: Antitrust Law and Economics* (Princeton: Princeton University Press, 1993), pp. 42-44.

paying out-of-network claims.[120] All of these firms, whether allegedly active conspirators, "effective coordinators," or part of the "competitive fringe" have a basic interest in keeping costs down, including out-of-network claim costs. They also have an interest in buying the information needed from an efficient generator of that data at efficient prices. The obvious fact that having "more data is better" and that large datasets can be efficiently assembled by a single entity is at the heart of the FAIR Health project to create a replacement UCR database for Ingenix. Those efficiency principles have not been abandoned by FAIR Health because of a fear of fostering a conspiracy to reduce out-of-network payments. Moreover, plaintiffs believe that the Ingenix system reflects the but-for world they use in measuring damages. The only material change is plaintiffs' assertion that higher "true" UCR rates would have been produced by Ingenix if Ingenix had not suppressed the CPT distributions. There is nothing in plaintiffs' but-for world that suggests the alleged conspirators would stop collecting, contributing, or buying Ingenix data. Similarly, Dr. Foreman has argued that the billed charge data from all private commercial insurers should be used to develop accurate billed charge percentiles.[121] Thus, the alleged anticompetitive act of the conspiracy does not lie in the collection, contribution, or buying of the charge databases by nearly 2,000 firms. It must lie elsewhere but that is not explained by Dr. Rausser.

81. Dr. Rausser tries to avoid dealing with the large number of alleged conspirators through semantics. He creates categories of conspirators so he can seemingly narrow the number of conspirators needed to effectively conspire. However, he neglects to define the conspiracy even for these active members. For the rest of the members of the "coordination," he simply assumes that they all follow a rule of thumb to set out-of-network reimbursements at or about the 80th percentile.[122] So his "effective coordinators" apparently do not matter to implementing the conspiracy and do not even have to know they are part of a conspiracy. This is nothing more than an imaginative construction with no explanation and no evidentiary foundation. Further, the

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[120] Declaration of James Cross, M.D. (Head of National Medical Policy and Operations for Aetna), June 30, 2010, ¶¶ 12 and 17.

[121] Deposition of Stephen Foreman, May 17, 2010, pp. 115-116.

[122] Rausser Merits Report, ¶ 15 ("Although these rate schedules reported a variety of percentiles, the reality is that insurers appear to have fairly consistently applied the same percentile in setting their UCRs and there was relative uniformity across the industry.").

active conspirators are not identified enough to know their numbers in order to analyze how such a large conspiracy might actually function or what the benefit to any of them would be to defect. Their numbers may be large or small—large, if all data contributors and/or users are in this group. More importantly, their conspiratorial activities are not even identified. As noted, the mere act of contributing, buying, and using data is not an anticompetitive act. How is it that these active conspirators help to accomplish a suppression of the charge data distributions? And then, hundreds of allegedly "effective coordinators" make their own independent business judgments about how they will manage their out-of-network costs but, according to Dr. Rausser, unwittingly support the alleged conspiracy simply by following their individual self-interest. In addition, there are countless other firms from the "competitive fringe" that do not even use Ingenix data but, allegedly, also unwittingly serve the conspiratorial ends of the others by making similar business judgments based on other data sources. Finally, there is no economic evidence and only the weakest of assertions that any of these firms is working against its own interests in the furtherance of a conspiracy that will yield higher profits for all if everyone cooperates with the conspiracy and its goals. It is hard to define defecting if one does not identify what the firms must do to advance the conspiracy and why they even have an incentive to cheat by stopping that behavior and, thus, stop working against their independent self-interests.

82. Again, a much more obvious conclusion is that there is no conspiracy. In fact, Dr. Rausser's observation that there are many passive and perhaps unknowing members of the conspiracy is direct economic evidence that firms do not have to conspire in conflict with their own economic self-interests to manage their out-of-network costs. Dr. Rausser layers on various imaginative constructions, but no economic evidence that any of these firms is doing anything different than what they would do out of pure independent self-interest.

B. The Alleged Conspirators Differ in Their Incentives

83. Dr. Rausser testified in his class cert deposition that the alleged conspirators and coordinators included all of the entities who licensed the Ingenix databases as well as Ingenix.[123] As mentioned above, a review of the Ingenix PHCS and MDR customer lists for 2004 and 2009

[123] Deposition of Gordon Rausser, May 20, 2010, p. 87.

show that the alleged conspirators and coordinators included health insurers, third-party administrators, rental networks, health care consulting firms, self-insured employers, hospitals, IPAs/medical groups, and surgery centers.[124]

84. The incentives of the self-insured employers are very direct. All employers, including self-insured employers, are interested in attracting and retaining high quality employees, in part, by offering good health care coverage, often with out-of-network benefits. But these firms are also very interested in controlling their premiums or medical expenses in the delivery of that care. Self-insured employers have an immediate sense of this tradeoff and, when self-insured with Aetna, can usually set the percentile reimbursement level they feel best balances the costs and the benefits of purchasing out-of-network coverage for their employees. Thus, they internalize the tradeoff and regularly choose a UCR threshold in the 75th-90th percentile range.[125] This provides generous reimbursement and allows their employees to have the choice of the vast majority of providers, but imposes the risk of choosing a provider with excessive charges on the employee who chooses to go out-of-network. The self-insured firms represent a clear model of why an independent decision by each firm is logical and why these employers might also make similar judgments on the UCR percentile that best trades off greater provider choice at acceptable costs. Again, about two-thirds of Aetna's non-HMO enrollment is covered under a self-insured employer.

85. Hospitals and IPAs/medical groups are both providers themselves. If they also act as self-insured employers, they may seek a similar balance as that chosen by other self-insured employers. If, instead, they want to provide some out-of-network benefits but prefer to divert their employees to their own facilities and discourage out-of-network care, they might

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[124] INGENIXMDL000072229-689 and INGENIXMDL001091205-385.

[125] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, ¶¶ 49-52 and Exhibit 20. It is interesting to note that Dr. Rausser recognizes that employers cannot realistically choose a plan with a UCR percentile that is below 50 percent and I would add, by implication, will find themselves in a fairly narrow range as to which percentile to choose—somewhere in the 75-90 range would be likely. In his May 21, 2010 deposition, Dr. Rausser (p. 353) was asked,

Q. "Is it possible that an employer...could decide to set an out-of-network benefit level at the fiftieth percentile of the PHCS database?

A. Under competitive market conditions with regard to hiring skilled employees who have a willingness to pay the employees for out-of-network services, they're not going to be able to attract the best employees, is it possible? Anything is possible. Is it sustainable in a competitive labor market? No."

choose a lower UCR percentile. If this is part of their incentive, they would not necessarily choose a percentile consistent with the average self-employed firm.

86. Similarly, some firms with strong profitability, strong demand for highly trained workers, or a very mobile workforce might well place a higher recruiting value on a generous out-of-network benefit. They might choose the 90th or 95th percentile, or even pay full-billed charges. Conversely, a firm that is financially struggling has labor demands that are easy to meet and a stationary workforce may opt for a less generous out-of-network package or forego such benefits entirely.

87. Even the incentives of the health insurers likely differ among each other. This is because some of the health insurers are comprised primarily of fully-insured plans, while others are comprised primarily of self-insured plans. For example, 98 percent of Health Net members were enrolled in fully-insured plans.[126] In contrast, only 33 percent of Aetna's members are enrolled in fully-insured plans[127] and only 10 percent of CIGNA's members are enrolled in fully-insured plans.[128] Given that the health insurers are only responsible for paying the out-of-network healthcare costs for their fully-insured members, the health insurers that are comprised primarily of self-insured plans likely have different incentives than those comprised primarily of fully-insured plans. It would not matter to them if the out-of-network percentile was high—the self-insured employer bears the risk for out-of-network medical costs. However, these incentives may be muted by the competition that occurs downstream when all insurers are competing for members. Even for the insurer with more fully-insured business, the savings from possibly setting a lower percentile threshold would be competed away in an effort to attract members, especially if the out-of-network benefits were not as good as those offered by other insurers. In the end, a reasonable range of UCR percentiles, deductibles, coinsurance, copayments, and annual maximums would likely emerge from this competitive process.

88. The health insurers also differ on their for-profit versus not-for-profit status and on the different parts of the country that they serve. In particular, the large national insurers,

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[126] Aetna's Opposition to Plaintiffs' Motion for Class Certification, p. 5.

[127] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, ¶ 23.

[128] Noether Class Cert Report, ¶ 35.

who cater predominately to self-insured, multi-site, and multi-state corporations, are likely to have much different interests in providing a broad range of provider choice than the small regional or local insurers, who cater predominately to individuals, small groups, and more localized mid-sized companies.

89. Given these differences among the alleged conspirators, it is economically implausible that they could have agreed upon and implemented the alleged conspiracy to reduce out-of-network reimbursements. There are too many important details to work out in reaching a conspiratorial agreement and too many different incentives among the alleged conspirators to achieve a stable, long-term, national agreement. Further, the evidence is that employers can and do choose the percentile and other terms that govern out-of-network usage that best suits their situation.

C. The Alleged Conspirators Would Not Have Needed a Conspiracy to Achieve Their Goal

90. As mentioned, the purported goal of the alleged conspiracy was to suppress reimbursement for out-of-network healthcare services. In his merits report, Dr. Rausser claims that the plaintiff subscribers had no way to defend themselves against the alleged conspiracy since (1) they are locked into their policies when they need out-of-network healthcare services and (2) they could not shop around for alternative health plans because the insurers failed to disclose how UCRs had been set.[129] Similarly, in his merits report, Dr. Rausser claims that the plaintiff providers had no alternatives but to accept the suppressed reimbursement for out-of-network healthcare services since the reimbursement for both in-network services and for treating Medicare and Medicaid patients was much lower.[130]

91. Assuming that Dr. Rausser is correct in his claims that employees have no choice (which I will discuss in more detail in the next section), this means the alleged conspirators

[129] Rausser Merits Report, ¶¶ 68 and 105.

[130] *Ibid.*, ¶¶ 40, 57, and 67. Logically, this amounts to an admission that the highest rates available to physicians—even after the alleged suppression—are the out-of-network rates paid under the UCR system. Dr. Rausser is observing that there is nowhere for providers to turn to replace a patient paying the allegedly suppressed UCR rates because in-network commercial insurance and government programs do not pay as much as the UCR rates. Of course, the physicians could also just balance bill the patient and leave the reimbursement issue to be debated by the patient and his/her insurer.

would not have had to conspire to achieve their goal. They could have each independently and unilaterally reduced reimbursements for out-of-network healthcare services on their own. Because the plaintiff subscribers and plaintiff providers had no alternatives, each alleged conspirator could have reduced the reimbursements without losing any subscribers or having the providers refuse to treat their members. Therefore, if Dr. Rausser is correct in his assertions about the alternatives that the plaintiffs faced, this means the alleged conspiracy is not economically plausible since the alleged conspirators could have achieved their goal without having to conspire. Further, if there are virtually no payers that pay as much as what providers can get for their out-of-network services, that is economic evidence of the generosity of out-of-network rates relative to other market rates. In effect, plaintiff providers are only locked in to the extent that there are not more of these high reimbursement out-of-network customers. This also explains why out-of-network costs can quickly get out of control and must be managed—these services are high priced compared to in-network rates.

D. Every Action Is Consistent with the Alleged Conspiracy

92. Dr. Rausser testified at his deposition that the only thing required for his opinion that the alleged conspiracy took place is that the overall distribution in the Ingenix databases has been suppressed.[131] He went on to testify that his opinion does not require the insurers to reimburse for out-of-network healthcare services using the same percentile, though he also felt that the evidence suggested that there is "gravitation" towards the 80th percentile.[132] He further testified that his opinion does not even require many of the insurers to be using the Ingenix databases.[133] They can also be "effective coordinators" but not an active part of the conspiracy.[134] Finally, he testified that an insurer could be participating in the alleged conspiracy in some markets, but not in others.[135]

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[131] Deposition of Gordon Rausser, May 20, 2010, p. 131.

[132] *Ibid.*, pp. 133-135 and Deposition of Gordon Rausser, May 21, 2010, pp. 300-301. Note that he backs somewhat away from this testimony in his merits report.

[133] Deposition of Gordon Rausser, May 20, 2010, pp. 146-147, 215, and 223.

[134] Declaration of Gordon Rausser, Ph.D., August 23, 2010, ¶ 31.

[135] Deposition of Gordon Rausser, May 20, 2010, p. 156.

93. Basically, Dr. Rausser is assuming that any and all actions by any of the alleged conspirators are consistent with the alleged conspiracy, even if those actions result in their behaving much differently from each other. The only thing that appears to unite them is that they contribute to, buy, and/or use Ingenix data. Indeed, under Dr. Rausser's alleged conspiracy, licensees are co-conspirators regardless of whether they license the same database module or even the same Ingenix database (i.e., one can license MDR modules or another can license PHCS modules). This is not an economically plausible conspiracy. If the alleged conspiracy actually took place, I would expect the alleged conspirators to have behaved in a parallel manner, such as in the percentiles they used to reimburse for out-of-network services, in their use of the Ingenix databases, and in their participation in the alleged conspiracy everywhere.

94. Dr. Rausser's description of the alleged conspiracy does not make any economic sense. He proposes that somehow a large set of conspirators are manipulating the data and lowering the percentiles in the Data Market but, instead of insisting that the conspirators all set the same percentile and offer the same copayment terms on all out-of-network benefits packages, his conspirators can do whatever they want in their use of the data. There can be no effective conspiracy, even if one believes that the data have been suppressed. If the allegedly suppressed 80th percentile is now thought to be too stingy by one employer for its employees, that employer can raise the UCR cutoff for them to the 85th percentile and, by Dr. Rausser's measure, that would not be cheating on the alleged conspiracy. Or, the employer could lower the out-of-network copay or deductible in order to make the benefit more generous. But any of these actions totally undercuts the purpose of the alleged conspiracy in the Data Market—to lower reimbursements for out-of-network care and not drive them back up through competition. The simple fact is that most employers can choose their preferred UCR cutoff or reset some of the other terms for paying for out-of-network care at every review of their health care coverage. Whether Dr. Rausser recognizes that as a violation of the rules of the conspiracy, it is sufficient to undercut the alleged conspiracy and the alleged manipulation of the charges distributions in Dr. Rausser's Data Market.

95. Again, the simpler argument is that employers do what they want because they are following their independent self-interest. There is no conspiracy. An employer is balancing the labor market attractiveness of offering a health plan with out-of-network benefits against the

worry that out-of-network costs will get out of hand. As Dr. Rausser has noted, any plan offering a 50th percentile plan will make it very hard for the employer to attract talented workers.[136] But it is also very clear that the charges distributions escalate rapidly, often at about the 90th to 95th percentile and out-of-network costs get out of hand quickly. Thus, at what percentiles would we expect independent firms to set their out-of-network reimbursements? Logically, perhaps the choice would be anywhere from about the 60th to the 90th percentile. Moreover, the 80th percentile becomes a sensible point at which set the threshold—a wide choice of providers is made available while avoiding a range of excessive charges. These choices would undercut a conspiracy, yet Dr. Rausser seems to recognize them as consistent with his alleged conspiracy. Any conduct by the alleged conspirators is simply assumed to be conspiratorial, even when it is inconsistent with the alleged conspiracy and even when it is fully consistent with independent, self-interested behavior.

E. The Alleged Conspiracy Does Not Control for All of the Methods Used to Adjudicate Out-of-Network Claims

96. In his merits report, Dr. Rausser claims that the conspirators used the Ingenix databases to coordinate the alleged conspiracy.[137] However, the Ingenix databases only deal with one method of reimbursing for out-of-network healthcare services, the UCR method. Importantly, insurers use a number of other methods, including wrap networks, bill negotiations, Medicare-based fee schedules, and other fee schedules. The use of these other methods can be substantial. For example, only 3 of WellPoint's 14 Blue Cross Blue Shield companies use the Ingenix databases to reimburse out-of-network claims and, one of those three companies (Blue Cross of California), did not begin to use the Ingenix databases until 2008.[138] For a conspiracy to successfully reduce reimbursements for out-of-network healthcare services, it would have to include all of the major methods used to pay for those services. Otherwise, there would be no way to enforce the conspiracy since the conspirators could use the other methods to reimburse for the out-of-network services. This would be a form of defection. The conspiracy would also

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[136] *Ibid.*, May 21, 2010, p. 353.

[137] Rausser Merits Report, pp. 9-10.

[138] Declaration of David Singer, *In re WellPoint, Inc. Out-of-Network "UCR" Rates Litigation*, MDL 2074, August 6, 2010, Exhibits A and D.

have to include all of those other factors that influence how much the consumers are reimbursed for out-of-network services, including the deductible, coinsurance, copayment, and annual maximum amounts. Given that the alleged conspiracy focuses on only the Ingenix databases and does not control for all of the other methods used to reimburse for the out-of-network services, and given that the alleged conspiracy does not control for all of the other factors that influence how much the consumers are reimbursed for out-of-network services, this means the alleged conspiracy is very incomplete and economically implausible, in this instance, because the conspirators would have had no incentive to join it. This may be why Dr. Rausser testified during his deposition that he has seen no evidence of a conspiratorial agreement among the alleged conspirators.[139]

F. The Alleged Conspirators Were Transparent about How They Set Their UCRs

97. Dr. Rausser testified in his class cert deposition that concealment of how the alleged conspirators set their UCRs is a critical part of the alleged conspiracy.[140] This information, however, was widely known to the benefit consultants, the self-insured employers, and the state regulators. In particular, a review of Aetna's request for proposals (RFPs) show that Aetna typically described in detail to the benefit consultants and the self-insured employers how it set its UCRs.[141] For example, in its 2002 RFP to AECOM Technology Corporation, Aetna stated:

> "Our primary source of reasonable and customary charge data is the Ingenix PHCS (formerly referred to as HIAA data). The profile contains charges covering a six-month period and is updated twice a year. The charges are grouped into approximately 400 geographic areas. We standardly set R&C at the 80th percentile, however, customers may request alternate levels."[142]

Likewise, in its 2002 RFP to Owens Corning Claims Administration, Aetna stated:

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[139] Deposition of Gordon Rausser, May 20, 2010, pp. 241-242.

[140] *Ibid.*, p. 128.

[141] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, Exhibits 10-19.

[142] AET-01369820. Note that this is referring to the Ingenix PHCS dental module.

> "We determine our reasonable and customary (R&C) profiles using primarily the Ingenix PHCS database (formerly owned by HIAA), although we may use other data as needed. All fee data is based on postal zip codes. We update our data twice annually.
>
> The standard reasonable and customary (R&C) percentile is the 80th, with a $10 liberalization corridor. Owens Corning may elect either the 50th, 60th, 70th, 75th, 85th, 90th or 95th percentile as an alternative."[143]

These RFPs demonstrate that the benefit consultants and the employers did have access to the information.

98. Similarly, a review of Ingenix presentations to various state departments of insurance show that Ingenix was very straightforward about where it got its charge data from and what adjustments it made to the data in creating the percentiles.[144] For instance, in 2004 and 2005, Ingenix told the regulators that it received the charge data from nearly 200 payers and that it incentivized the payers to submit their data. Likewise, Ingenix told the regulators that it "scrubbed" the data to remove records with invalid service codes, date of service too old, invalid place of service zip codes, outliers/incorrectly reported charges, and modifiers. Finally, Ingenix told the regulators that it grouped the information into geozips and that it used derived data to create the percentiles if the number of occurrences for any CPT-geozip combination equaled eight or less.

99. In addition, even though some of the members may not have had access to all of this information, they did have access to the allowed amounts that some of the payers would authorize for the out-of-network services. For instance, CIGNA allowed members to obtain UCR amounts for up to five procedure codes, or more, after signing a non-disclosure agreement.[145] Likewise, starting in 1999, Aetna's agreement with Ingenix that governs its use of the PHCS database allowed Aetna to share Ingenix data with members, providers, and plan sponsors for specific CPT codes.[146] Also, Aetna's Customer Service Representatives would

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[143] AET-01397788.

[144] INGENIXMDL000736717-827.

[145] Noether Class Cert Report, ¶ 281.

[146] Declaration of Deborah Justo (Analyst in Aetna's Provider Data Service), July 1, 2010, ¶ 13 and Exhibit B at AET-C 0014796.

release this information to members, providers, and plan sponsors when requested.[147] Finally, United made available an electronic toolbox that discloses to its members the range that specific out-of-network services would likely cost.[148] Thus, this information was known.

100. Given that Dr. Rausser asserts that concealment of how the alleged conspirators set the UCRs is a critical part of the alleged conspiracy, and given that it this information was widely known to many of the market participants, this is an additional reason why the alleged conspiracy is economically implausible.

G. The Coordination of Benefits Process Could Not Effectively Be Used to Monitor the Alleged Conspiracy

101. According to Dr. Rausser, the alleged conspirators used the coordination of benefits (COB) process to monitor the alleged conspiracy.[149] However, he has found no evidence that the COB process was ever used for this purpose. Further, this claim is unrealistic since it is not always possible to tell from the explanation of benefits (EOB) how the primary payer determined the allowed amount. It may have been based on a UCR threshold but it also may have been based on a post-service bill negotiation, a wrap contract, or a pre-arranged fee. Similarly, to the extent that clients of the primary payer choose different UCR thresholds, comparing the primary care payer's out-of-network rates does not reflect the full range of percentiles being used. Also, the actual process by which Aetna handles its COB claims results in datasets that are unwieldy and inadequate for the purpose of monitoring competitors' Ingenix-based payments to non-participating providers.

102. The COB rules are in place to avoid duplicate payment for health care services when a patient has coverage from two or more payers. These policy provisions are a standard feature of health plans and are subject to regulation on a state-by-state basis. The COB rules determine which payer is responsible as the primary payer and the basis for the overall allowed amount to be relied upon by both payers. The allowed amount may be determined in part by

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[147] Declaration of Michelle D. Ferensic-Smith (Aetna's Vice President for Claim and Provider Service Operations), June 28, 2010, ¶¶ 62-63.

[148] United document titled "The Consumer Toolbox" dated 2005. [http://www.hubmagazine.net/pdfs/101007_Consumer%20Tools.hub.pdf.]

[149] Rausser Merits Report, ¶ 103.

whether or not the provider is a participating provider with the primary payer.[150] The "secondary payer" generally picks up the difference between the allowed amount and the amount paid by the primary payer.

103. A claim item becomes part of Aetna's COB process if Aetna is the secondary payer. Medicare is the primary payer for approximately 80 to 85 percent of Aetna's COB claim items since Aetna administers Medi-gap coverage for a substantial number of members under their retirement plans and since Medicare by definition is the primary payer. The primary payers for the remaining 15 to 20 percent of Aetna's COB claim items are generally commercial plans, with a small percentage of claims covered by auto accident medical coverage. Of these COB claims, a "strong majority," perhaps as much as 75 percent, are adjudicated by the primary payer on a participating-provider basis. Of those COB claims that are adjudicated on a non-participating provider basis, in over 80 percent of the claims, no adjustments are made and the providers' full billed charges are allowed. Thus, there are only a relatively small number of COB claims that could have been used to monitor the alleged conspiracy. Moreover, as mentioned, for these COB claims, there is no way to tell precisely whether the primary payer determined the allowed amount using the Ingenix databases or some other method, such as a wrap network, bill negotiation, Medicare-based fee schedule, or customized fee schedule.[151]

104. In addition, the information maintained in Aetna's COB systems would be an inadequate basis to monitor the Ingenix-based usual and customary allowed amounts set by other health plans. The secondary payer generally needs just four pieces of information from the primary payer in order determine its own payment amount: (1) the fact that another payer is the primary payer (the identity of the payer is not relevant), (2) the primary payer's allowed amount,

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[150] For instance, a patient may have coverage under a fully-insured Aetna plan and another commercial insurer's fully-insured plan. If the state where the patient resides and where the services were provided recognizes the NAIC rules, then one of three possible allowed amounts would apply for the overall reimbursement:

- If both primary and secondary payers' allowed amount is based on a participating provider rate, then the primary payer's rate applies;
- If both primary and secondary payers' allowed amount is based on a non-participating provider rate, then the highest of the two payer's rates applies; and
- If one payer has a participating provider allowed amount and the other payer has a non-participating provider allowed amount, then the primary payer's rate applies.

[Interview with Elizabeth O'Connor (Project Team Leader of HOPP and Claim & Call Policy for Aetna)]

[151] Interview with Jeff Miller (Manager of National Customer Operations Program Delivery for Aetna).

(3) whether the allowed amount was set on a participating or non-participating basis, and (4) the amount paid by the primary payer. This information is typically provided to the secondary payer via the primary payer's EOB or explanation of payment (EOP) forms. The working data files apparently do not track additional information. One would need to review a larger and less accessible database containing the original materials received from the primary payer.

105. It is my understanding that Aetna generally keeps data that indicate whether a member is covered primarily by another health plan in its enrollment records. The Aetna enrollment records for HMO members have a numeric code that indicates the specific health plan that is primary for the member. Aetna's PPO member enrollment records generally do not have this information. Although there is an optional free-form cell available for this type of information, it is not part of the required PPO enrollment work flow and is generally not populated. As a result, the identity of the primary payer is not easily accessible for PPO members.

106. Aetna's claims data systems include an indicator as to whether a primary payer set the allowed amount on a non-participating or participating provider basis, since this information is necessary to properly process a COB claim. However, Aetna's claims systems do not include information as to how the primary payer arrived at the allowed amount. A manual review of individual EOB or EOP materials submitted with the COB claim would be necessary to determine which reason codes were listed by the primary payer for the adjustment. This would be a time-intensive and unwieldy process. Even then, there is no definitive way to tell from the reason codes whether an allowed amount was set on the basis on an Ingenix percentile amount or some other method.[152] Further, many primary payers offer a range of percentiles, as chosen by the clients of those companies. It would be difficult to define whether the rival payer was following the conspiracy rules, such as a specific percentile-based rule with similar copayment and deductible rules for out-of-network care. Thus, it is economically implausible that the alleged conspirators used the COB process to monitor the alleged conspiracy, especially when it is hard to know what they are looking for as evidence of a defection and hard to see what they would do with the information if they found it.

[152] Interview with Jeff Miller (Manager of National Customer Operations Program Delivery for Aetna).

V. INGENIX HAS NOT EXERCISED MARKET POWER IN THE DATA MARKET AND THE LINKED MARKETS ARE NOT PROPER RELEVANT MARKETS

107. Dr. Rausser claims that there are three relevant markets at issue in this case.[153] The first market is the Data Market, which represents a national market for the "sale of UCR schedules." Ingenix competes on the selling side of this market, while the insurers, self-insured employers, third-party administrators, rental networks, and others compete on the buying side. The second market is the Linked Market for the "reimbursement of out-of-network health and dental services." The providers compete on the selling side of this market, while the insurers and members compete on the buying side. Finally, the third market is the Linked Market for the "issuance of PPO and POS insurance plans." The insurers compete on the selling side of this market, while the employers and employees compete on the buying side. Dr. Rausser considers the Data Market to be an upstream market and both Linked Markets to be downstream markets.

A. Ingenix Has Not Exercised Market Power in the Data Market

108. The Data Market appears to have substantial scale efficiencies. This means that because of the high fixed costs associated with collecting and processing the charges data, it is efficient to centralize and standardize the production of this information, with the result that costs are lower and the quality and reliability of the data are higher. Such markets may not be able to support more than a few sellers of competing products. This explains Ingenix's large share. For example, Ingenix estimated that it had a 75 percent share of this market in 2005.[154]

109. Although a large share can indicate that a firm has market power, it is not a sufficient basis to claim that the firm has market power or has necessarily exercised that market power. By definition, an exercise of market power means that the firm has increased the price of its product above competitive levels or has lowered the quality of its product below the level found in competitive markets. In this case, I have seen no evidence that indicates that Ingenix has increased the price of its databases above competitive levels. The high operating profit numbers that Dr. Rausser cites are not unusual in high fixed cost production industries and are not compared to any similar benchmark to indicate whether these operating margins, by

[153] Rausser Merits Report, ¶¶ 27-33.

[154] INGENIXMDL000527453.

themselves, indicate market power.[155] Also, I have seen no evidence that Ingenix has decreased the quality of its databases below the level that would be found in competitive markets.

110. Further, if Ingenix produces a higher quality and more reliable product more efficiently, it may well be the case that buyers of these data are better served with a firm like Ingenix having a high share than if these types of data were produced in Dr. Rausser's alternative but-for world, which presumably includes many different smaller producers of data. More importantly, however, I strongly doubt that his view of competition in the but-for world would exist, given the efficiencies and product improvements that centralized data processing offers. Also, I note again that Dr. Rausser's but-for world is not consistent with the assumption plaintiffs make in their view of the but-for world. On the damages side, plaintiffs simply posit that Ingenix still exists, but stops the alleged suppression of the data. If Dr. Rausser posits that, absent the alleged conspiracy, Ingenix would fall apart and many data sellers would flourish in the now open and competitive Data Market, then he must determine whether the cost and quality of the data produced in that assumed market is an improvement over a much more realistic but-for world where Ingenix still exists, still has the same share, and still has the same degree of market power. In such a world, the prices of the Ingenix data would likely be the same. Thus, Dr. Rausser has not demonstrated that prices are monopolistic now or that, even if they are, that they would not be monopolistic in the but-for world.

111. Also, Dr. Rausser argues that Aetna and CIGNA would likely enter the Data Market, absent the conspiracy because of the apparent high profit opportunities available. But, as discussed, Aetna chose to adopt the PHCS data in 1996 due to its more extensive and more reliable coverage. That was before PHCS was bought by Ingenix and before the alleged conspiracy began in 1998. Thus, the logical conclusions are that (1) Aetna would not have entered the Data Market absent a conspiracy because it chose to leave that market when presented with that same situation and (2) that if Aetna could produce high-quality UCR data for itself at lower cost, it would. Still, this possibility is one constraint on Ingenix's pricing of its product.

[155] Rausser Merits Report, ¶ 82.

112. Another very important constraint on Ingenix is the availability of other data sources, particularly the CMS database and the RBRVS payment system. There is no reason that users of the Ingenix data cannot switch to a different approach and adopt a simple rule for out-of-network reimbursements, such as paying for such care at 140 or 150 percent of Medicare. For example, beginning in 2003, Aetna's state filings included an option for defining the out-of-network benefit in terms of a percentage of Medicare.[156] In addition, American Airlines has done just that—it has set its out-of-network rates at 140 percent of Medicare for its self-insured employees.[157] Even United Healthcare is increasingly moving to such a system. For instance, "United Plans employ the [percentage of Medicare standard] in virtually every state in the nation."[158] Thus, Ingenix cannot have substantial market power when such a simple system is readily available as a substitute.

113. Finally, it is important to note that any alleged exercise of market power in the Data Market is irrelevant to the operation of the alleged conspiracy, as constructed by Dr. Rausser. First, the alleged purpose of the conspiracy in the Data Market is to produce suppressed distributions to be used by all data licensees when they set out-of-network rates. However, as a simple matter of logic, it makes little sense for the 2,000 or so alleged conspirators to help Ingenix monopolize the Data Market and then have to pay monopoly prices for the very data that is the output of their alleged conspiracy. Why would anyone cooperate with that conspiracy? Second, whatever the price of the data is, the conspiracy can only be sustained if the users of the data agree to use suppressed data without adjusting the percentile they choose or the copayment, deductible, and coinsurance terms on their out-of-network benefits. As discussed above, employers are very savvy about balancing the recruiting benefits of offering out-of-network coverage against the potentially high costs of blindly paying billed charges. They will adjust the benefit, as needed. There is no evidence of any agreement among the users of these data not to consider that tradeoff for their own companies or to blindly choose one percentile to

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[156] Declaration of Merry Noss (Manager of Product Management and Development in Aetna's Marketing, Product, and Communications Department), June 29, 2010, ¶¶ 16-18.

[157] United document titled "Summary of Material Modifications for Health and Welfare Benefit Plans Sponsored by American Airlines, Inc., December 15, 2005," p. 11. [http://www.aacareers.com/ebg/Archive/smm2006/omss_smm_06.pdf]

[158] Declaration of Staci Delorenzo (Senior IT Systems Analysis Consultant at United), July 2, 2010, ¶ 6.

assure that the alleged suppression is implemented. Thus, the alleged conspiracy in the Data Market is totally undone when the users of the data make their independent decisions on how to structure their out-of-network benefits. Dr. Rausser provides no evidence that the users of the data choose terms that effectively and cooperatively suppress out-of-network reimbursements. If these employers and others want to pay lower rates, they simple would choose a lower percentile and more cost-sharing from their employees.

114. For all these reasons, Dr. Rausser's opinion that Ingenix has market power or has exercised market power in the Data Market is unsupported and irrelevant, particularly absent evidence of an agreement among the many conspirators in the use of the data when choosing the rates to be paid under out-of-network benefits.

B. The Linked Markets Are Not Proper Relevant Markets

115. Dr. Rausser's focus on his alleged Linked Markets is misplaced. Neither of his Linked Markets are properly defined relevant markets. The only downstream market implicated in the alleged conspiracy is the market for commercial health insurance coverage.

116. Dr. Rausser claims that the Linked Market for the reimbursement of out-of-network healthcare services is a proper relevant market. It is not, for at least three reasons. First, a market involves the situation where a product or service is bought or sold. Since reimbursements, in general, are not bought or sold, his definition does not make any economic sense. Further, while there may be exceptions of which I am unaware, there is no separate market for the buying and selling of out-of-network services. These services are sold as part of a broader package of insurance coverages. These reimbursement rates are set in conjunction with many other commercial terms combined into an overall premium with a variety of out-of-pocket obligations, which takes me to my second observation on this issue. Second, a relevant market is supposed to include all products or services that are good demand and supply substitutes for each other.[159] On the demand side, most patients can shift between in-network and out-of-network providers depending on relative prices. Also, if they have a choice of health plan, subscribers can possibly choose between health plans based on out-of-network benefit differences at open

[159] D. Carlton and J. Perloff, *Modern Industrial Organization* 5th ed. (New York: Pearson Addison-Wesley, 2005), Chapter 19, p. 646.

enrollment time. On the supply side, most providers offer both in-network and out-of-network services and can decide to take on more in-network contracts if that helps the provider's business because the out-of-network patient volumes or the reimbursement is too low.[160] These providers can also take on patients covered by government payers, such as Medicare patients. The argument that these out-of-network providers have no other high-paying patients to turn to only confirms that out-of-network reimbursements are well-above other available market rates and are among the highest paid.

117. Third, and most importantly, the alleged antitrust and RICO conspiracy does not involve out-of-network providers as either buyers or sellers. They are not in any relevant market at issue in this case. These providers are implicated only from having taken assignment as a right to collect on behalf of subscribers they have seen as patients. If there is a competitive problem, the providers are not the economically injured party because they are not part of a transaction with the alleged conspirators (e.g., the insurers). The parties affected by the alleged conspiracy are the subscribers who allegedly have been under-reimbursed for their out-of-network usage as a result of an antitrust conspiracy. Thus, there is no market for out-of-network health care services that is affected. There is separately a transaction between a subscriber and a non-contracted provider. By definition, however, the insurer has no contract, no price setting agreement, and no negotiation with the out-of-network providers. Thus, there is no transaction whose price is determined by the alleged conspirators. The out-of-network provider sets a price (i.e., his/her charges or some negotiated other rate with the patient) and the patient pays using, in part, reimbursement funds under the patient's out-of-network coverage. The provider has decided not to contract with an insurer—there is no willing buyer-willing seller agreement. The provider has an economic transaction only with the patient. If the provider takes assignment for a patient, that does not constitute an economic transaction between the provider and the insurer, only a collection agency relationship on behalf of the patient. Economically, it is similar to a company selling its receivables for collection by someone else. The "reimbursements" at issue are just one element of the health insurance contract between an insurer (or self-funded

[160] See, e.g., Deposition of Brian Mullins (Physician Therapist), February 22, 2010, pp. 124 and 140 and Deposition of Frank G. Tonrey, M.D. (Anesthesiologist), February 22, 2010, pp. 49, 101-102, 106-107.

employer) and the subscriber. Thus, the only relevant "Linked" market that might be affected by the alleged conspiracy is the market for the sale of commercial health insurance coverage.

118. Dr. Rausser also claims that there is a second Linked Market for the "issuance of PPO and POS insurance plans" that is a proper relevant market. However, this is also not a proper relevant market for at least two reasons. First, as mentioned above, a market involves the situation where a product is bought or sold. Unless "issuance" is intended to mean bought or sold, this is not a proper relevant market. Even then, it is an incomplete definition of a proper relevant market. Second, a relevant market is supposed to include all products or services that are good demand or supply substitutes for each other. Since many employers and employees consider HMO health insurance to be a good demand substitute for PPO and POS health insurance, all three types of products should be included in the same relevant market along with indemnity health insurance.

119. As noted, the proper definition for Dr. Rausser's downstream market would be the markets for commercial health insurance. These markets differ by geographic location (either states or MSAs) and should include all commercial health insurance products (i.e., HMO, POS, PPO, and indemnity). They should also include all fully-insured and self-insured products since many employers consider both types of products to be good demand substitutes for each other. This definition recognizes that the employers and employees (i.e., the subscribers) have many different alternatives for obtaining health insurance.

120. In his merits report, Dr. Rausser claims that the plaintiff subscribers who obtained their health insurance through their employers had no way to defend themselves against the alleged conspiracy, in part, since they were locked into their policies when they needed out-of-network healthcare services.[161] However, the above health insurance market definition shows that was not the case since all PPO and POS plans included both in-network and out-of-network benefits. This means the subscribers always had the option of switching to an in-network provider if they thought the cost of the out-of-network provider was too high. Also, most large employers offer their employees a choice among multiple health plans, and many married

[161] Rausser Merits Report, ¶¶ 68 and 105.

couples may be able to choose insurers from either of their employers' options.[162] Moreover, even though Dr. Rausser claims that the subscribers had no way of determining how much the insurers would pay for the out-of-network benefits ahead of time, the available record indicates that was not the case. Specifically, CIGNA allowed members to obtain UCR amounts for up to five procedure codes, or more, after signing a non-disclosure agreement.[163] Likewise, Aetna's Customer Service Representatives would release this information to members, providers, and plan sponsors when requested.[164] Finally, United made available an electronic toolbox to allow its members to determine how much out-of-network services would cost.[165]

121. Thus, Dr. Rausser's Linked Markets are not properly defined relevant markets. Further, he has not demonstrated that the many alleged conspirators have market power in either of his Linked Markets or in a more properly defined market for commercial health insurance coverage.

VI. THERE IS NO ECONOMIC EVIDENCE THAT THE ALLEGED CONSPIRACY HAS ACTUALLY TAKEN PLACE

A. The Ingenix Databases Have Not Been Suppressed

122. According to Dr. Rausser, the anticompetitive goal of the alleged conspiracy was the suppression of the percentiles in the Ingenix databases.[166] However, he has not independently examined the Ingenix databases to determine if suppression has resulted from Ingenix's data processing.[167] Instead, he has relied upon the analysis conducted by plaintiff's damages expert, Dr. Foreman.[168] Besides Dr. Foreman's analysis, there are several other analyses that have examined whether there has been a suppression of the percentiles in the

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[162] The Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits - 2010 Annual Survey* (2010), p. 61.

[163] Noether Class Cert Report, ¶ 281.

[164] Declaration of Michelle D. Ferensic-Smith (Aetna's Vice President for Claim and Provider Service Operations), June 28, 2010, ¶¶ 62-63.

[165] United document titled "The Consumer Toolbox" dated 2005. [http://www.hubmagazine.net/pdfs/101007_Consumer%20Tools.hub.pdf.]

[166] Deposition of Gordon Rausser, May 20, 2010, p. 131.

[167] *Ibid.*, p. 35.

[168] Rausser Merits Report, ¶ 66.

Ingenix databases, including one I performed, which I discuss below. All of these other analyses found that there has not been a systematic downward bias. In addition, my analysis points out the computational and other errors in Dr. Foreman's analysis that have led him to his erroneous findings.

1. Dr. Foreman's Analysis

123. To examine the suppression issue, Dr. Foreman in his merits report compared the percentiles derived from the contributor data with the percentiles in the Ingenix PHCS database. The contributor data represent the data that the insurers gave Ingenix to create the PHCS and MDR databases. It is my understanding that once Ingenix got the contributor data, it validated and cleaned the data, including removing various outliers that the plaintiffs claimed it should not have removed. The version of the contributor data that Dr. Foreman used for his analysis includes these outliers—they have not been removed.[169]

124. Dr. Foreman compared the contributor data to the Ingenix data using two different studies. The first study, called the 300 CPT Study, developed percentile values for the 300 most common procedure codes in 300 geozip areas (supposedly) selected at random.[170] Although Dr. Foreman labeled this study a CPT study, it included dental codes and HCPCS codes as well.[171] The second study, called the 350 CPT Study, developed percentile values for the 350 most common procedure codes in the 450 most common geozips.[172] In contrast to the 300 CPT Study, this study included CPT codes only. According to Dr. Foreman, the results of both studies were consistent and showed a systematic downward bias in the percentiles, although even taken at face value his analyses did not show a downward bias for all (or nearly all) procedure codes in all geozips. Based on the 300 CPT Study, Dr. Foreman estimated that the weighted average downward bias across all percentiles in the Ingenix PHCS database equaled 11.2 percent

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[169] In accordance with Ingenix policy, Dr. Foreman stated that he removed claims with negative values, zero values, and values less than $1 for billed charges. [Expert Report of Stephen Foreman, Ph.D., J.D., M.P.A., dated August 9, 2010 (hereafter "Foreman Merits Report), ¶ 292]

[170] Foreman Merits Report, ¶ 288. In his merits deposition, Dr. Foreman testified that the geozips for the 300 CPT Study were not selected at random. [Deposition of Stephen Foreman, November 1, 2010, pp. 112-114]

[171] HCPCS stands for Healthcare Common Procedure Coding System. The HCPCS codes include non-physician services such as ambulance services, prosthetic devices, and drugs.

[172] Foreman Merits Report, ¶ 290. Note that, in fact, Dr. Foreman never actually used 450 geozips for any of the periods he analyzed. Instead, he used 461 geozips for 2006, 462 geozips for 2007, and all geozips for 2008.

for the medical and surgical modules and 9.8 percent for the dental module.[173] He then used these estimated underpayment figures to calculate the alleged damages. Interestingly, he applied the 11.2 percent to the medical and surgical modules and to the HCPCS modules without explaining why it would have any relevance for the HCPCS modules, since he derived the 11.2 percent figure using the medical and surgical modules only and made no estimates for the HCPCS modules.

125. In my opinion and based on my own extensive analysis, the methodology that Dr. Foreman used for his suppression analysis was inappropriate. In particular, Dr. Foreman compared contributor data for one time period with Ingenix PHCS data based on prior time periods. For example, in his 300 CPT Study, Dr. Foreman compared his estimated billed percentiles from the full year of the 2008 contributor data to the Ingenix PHCS 2007 Release 2 (issued in November 2007).[174] Since the deposition testimony indicates that the PHCS data represent a 12-month average and that there is typically a 2 to 3 month lag from when Ingenix gets the data and to when it releases the percentile calculations,[175] this means that Dr. Foreman was comparing January to December 2008 contributor data to Ingenix PHCS data based on 2007/2006 billed charges—that is, data that are substantially lagged. As such, it is not surprising that Dr. Foreman found that the percentiles in the later contributor data were often greater than the percentiles in the older Ingenix PHCS data. Dr. Foreman has simply measured inflation, not some conspiratorial suppression of percentile values.

126. By measuring differences due to inflation, Dr. Foreman cannot be testing whether the data processing approaches used by Ingenix have been a source of suppression, yet that is the conclusion he comes to in his analysis. From the practical side, no insurer or self-insured firm can compensate out-of-network care based on charges being charged today if those data have not yet been collected and analyzed, which is the implication of Dr. Foreman's test.[176] Many of the contributor charges used by Dr. Foreman did not exist at the time Aetna received or paid claims

[173] *Ibid.*, Tables 31 and 32.

[174] *Ibid.*, ¶ 294. In his 350 CPT Study, for 2006 and 2008, Dr. Foreman compares six months of contributor data to the prior Ingenix cycle. In 2007, he changes this approach and compares the full year of contributor data to the last cycle of 2006 and the first cycle of 2007. [*Ibid.*, ¶¶ 340-341]

[175] Deposition of Carla Gee (Vice President of Pricing Solutions for Ingenix), March 17, 2010, p. 41.

[176] Deposition of Stephen Foreman, November 1, 2010, p. 201.

using the Ingenix PHCS data that Dr. Foreman is using for his comparisons. To capture the effects of possible inflation, the Ingenix percentiles are updated every six months instead of only once per year. Rather than using an adjustment factor as Dr. Foreman suggested at his merits deposition, such as a CPT adjuster, Ingenix produces percentiles based on actual data. By updating these actual data regularly, Ingenix PHCS data build in the effects of any inflation for charges associated with a particular CPT code or geographic area in less than a year. Moreover, based on my review of the contributor data, there is variability in how charges rise or fall over time for particular CPT codes and geographic areas—some medical charges may be falling in one area, while rising in other areas. [See Exhibits 7A-7J for an illustration of how the 80th percentile for the top CPT codes rises or falls over time and how they vary across the top geozips.] Dr. Foreman has not explained how any aggregate adjustment would work, and he has not identified any method of improving the way Ingenix PHCS captures inflation based on actual data at the CPT/geozip level. Finally, it should be noted that the FAIR Health plan has decided not to make inflation adjustments to its UCR percentiles derived from the past year's data. It will only use an inflation adjuster when it is forced to use multiple years of data to obtain a sample size of 40 or more charges, in which case, it will inflate charge data from up to five earlier years to bring each charge observation up to current levels.[177]

2. Dr. Cantor's Analysis

127. At the class certification stage, Dr. Cantor examined the suppression issue by comparing the percentiles in the Ingenix PHCS database with the percentiles derived from five benchmark databases. Her analysis primarily focused on the years 2006 and 2007. The benchmarks consisted of the *Medical Fees in the United States* database published by Practice Management Information Corporation, the *Physicians' Fee Reference* database published by Wasserman Medical Publishers, the *National Dental Advisory Service Comprehensive Fee Report* published by Wasserman Medical Publishers, the *Physician Fee & Coding Guide* published by MAG Mutual Healthcare Solutions, and the *Medicare Part B Physician/Supplier Procedure Summary* database published by the Centers for Medicare and Medicaid Services

[177] FAIR HEALTH, "Summary of FAIR Health Phase I Rate Table Methodology," September 2010, p. 2 ("If there are fewer than 40 observations in a cell, FAIR Health will use claims data from the prior five years on a graduated basis proceeding year to year as necessary to broaden the cell to the requisite 40 observation threshold (adjusting charges from prior years using the Consumer Price Index)").

(CMS).[178] These databases all provide information about provider billed charges, although the form of the information differs from database to database.

128. To compare the Ingenix PHCS database with the benchmark databases, Dr. Cantor used both a frequency test and a matched pairs test. The results of her tests for all of the benchmark databases showed that there was no systematic downward bias in the Ingenix PHCS database.[179] For example, she writes: "My analysis of matched pairs for services by geographic areas on a national basis indicates that, when the Ingenix Database values are compared to the commercial and government benchmarks, the average percent differences are either (a) positive, which indicates that Ingenix values, on a national basis, tend to be higher than the benchmark, or (b) when the average percent differences are negative, they tend to be very small. These results do not support Plaintiffs' theory of a common downward bias."[180]

129. Dr. Cantor also used three of her benchmark databases to evaluate the results in the New York Attorney General's (NYAG) Report.[181] Specifically, the NYAG Report reported values from its Model Database for only two New York counties (Erie and Manhattan) and six CPT codes. The NYAG Report showed that all of the values from the Model Database except for one exceeded the 80th percentile of the Ingenix PHCS database for 2007. Using her benchmark databases, Dr. Cantor found the same basic results for Erie County, but the opposite results for Manhattan. In addition, when Dr. Cantor extended her analysis to three other counties (Albany, Monroe, and Onondaga) and to the state as whole, she found that there was no evidence of a systematic downward bias as claimed by the NYAG Report.

130. In his merits report, Dr. Foreman criticized Dr. Cantor's benchmark analysis saying "[t]he reference data did not constitute the population of billed charges and the data compilations for them are unknown and likely, every bit as problematic as Ingenix."[182] This criticism, however, misses the point. Unless it can be shown that the entities that own these benchmark databases are part of the alleged conspiracy—which especially in the case of the

[178] Expert Report of Dr. Robin Cantor, dated April 6, 2010 (hereafter "Cantor Class Cert Report"), Table 1.

[179] *Ibid.*, ¶¶ 20-21.

[180] *Ibid.*, ¶ 81.

[181] *Ibid.*, pp. 31-33.

[182] Foreman Merits Report, ¶ 276.

CMS Medicare data seems highly unlikely—then Dr. Cantor's benchmark analysis does provide a reasonable methodology for investigating whether the alleged conspiracy suppressed the Ingenix databases.

3. Dr. Slottje's Analysis

131. Dr. Slottje examined the suppression issue using three different approaches.[183] First, in his class cert report, he compared the 75th percentiles from the 2004-2008 editions of the *Physicians' Fee Reference* (PFR) with the 75th percentiles from the 2004-2008 Release 1 of the PHCS database.[184] The PFR is published by Wasserman Medical Publishers and is one of the benchmarks used by Dr. Cantor. Second, in his class cert report, he compared the unscrubbed charge data that United Health Group (UHG) contributed to Ingenix with the 80th percentiles of the 2006-2008 PHCS database. Ingenix pulled the UHG contributor data directly from the UHG data warehouse and did not eliminate any outliers.[185] As such, this approach does away with one of Dr. Rausser's concerns that the contributor data may have been manipulated before being submitted to Ingenix.[186] Third, in his merits report, he compared the 2006-2008 contributor data given to Ingenix with the 75th, 80th, and 90th percentiles of the 2007-2008 Releases 1 and 2 of the PHCS database.[187]

132. To compare the PFR percentiles with the PHCS percentiles, Dr. Slottje used the universe of CPT-geozip combinations in the two databases for the 2004-2008 time frame. In total, there were 3,889,948 CPT-geozip combinations. He found that "PHCS exceeded PFR in 1,975,903 (51%) of these combinations and PFR exceeded PHCS in 1,911,746 (49%)."[188] This

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[183] He describes the first two approaches in his Aetna Class Cert Report and the third approach in his CIGNA Class Cert Report. He submitted his CIGNA Class Cert Report as his Initial Merits Report in this case.

[184] Expert Report of Dr. Daniel J. Slottje, dated April 6, 2010 (hereafter "Slottje Aetna Class Cert Report"), pp. 13-15.

[185] *Ibid.*, p. 17, fn. 40.

[186] Rausser Merits Report, ¶ 3.

[187] Expert Report of Dr. Daniel J. Slottje, dated July 30, 2010 (hereafter "Slottje CIGNA Class Cert Report"), pp. 13-15.

[188] Slottje Aetna Class Cert Report, p. 15.

led him to conclude that "[m]y findings are inconsistent with and contrary to plaintiffs' claims that the PHCS charges are systematically biased downward."[189]

133. Dr. Slottje used two different methods to compare the unscrubbed UHG contributor data with the 80th percentiles of the Ingenix PHCS database. The first method involved comparing the billed amounts in the unscrubbed UHG charge data for the 20 most frequent CPT-geozip combinations to the 80th percentiles from the six 2006-2008 releases of the Ingenix PHCS database.[190] The second method involved using a random sample of 384 CPT-geozip combinations to compare the 80th percentiles of the unscrubbed UHG data with the 80th percentiles of the Ingenix PHCS database at three different points in time: 2004 (Release 2004-1), 2006 (Release 2006-1), and 2008 (Release 2008-2).[191] The results of both methods showed that "the amount of charges in the unscrubbed charge data contributed by United Healthcare which have values higher than the 80th percentile of the corresponding PHCS release vary both positively and negatively around 20%."[192] This led Dr. Slottje to conclude that there is no systematic bias in the Ingenix PHCS database.[193] Since the billed charges in the UHG contributor data covered the same period as the billed charges in the Ingenix PHCS database, his results do not suffer from the same problem as Dr. Foreman's results.

134. To compare the 2006-2008 contributor data to the Ingenix PHCS data, Dr. Slottje began by excluding all records that were not eligible for the medical and surgical PHCS Releases, such as coding errors, duplicates, ineligible dates of service, non-existent CPT codes and/or geozips, and procedures not pertaining to the medical or surgical module.[194] This eliminated 47 percent to 57 percent of the 1 billion records that Ingenix received from the contributors for each release.[195] He then excluded all CPT-geozip combinations that the Ingenix

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[189] *Ibid.*, p. 15.

[190] *Ibid.*, p. 18.

[191] *Ibid.*, p. 18.

[192] *Ibid.*, p. 21.

[193] *Ibid.*, p. 21.

[194] Slottje CIGNA Class Cert Report, p. 7.

[195] *Ibid.*, p. 7.

PHCS database calculated by derived data.[196] He further focused on only those CPT-geozip combinations for which a "Hi/Lo scrub" had eliminated some records.[197] He found that Ingenix "scrubbed" 6 percent to 7 percent of the eligible records of charge data for being too high or too low. Finally, he added back all of the eligible records that Ingenix had scrubbed/removed and then recomputed the 75th, 80th, and 90th percentiles for the relevant CPT-geozip combinations.

135. Based on this approach, Dr. Slottje found that "adding back in the high and low charges that Ingenix excluded due to the 'Hi/Lo scrub' either lowered, or had no impact on the percentile amounts for 89%-94% of all CPT-geozip combinations for the PHCS Releases in 2007-2008."[198] He also measured all of the CPT-geozip combinations that were not impacted by the "Hi/Lo scrub" and found that they represented the vast majority of the CPT-geozip combinations in terms of volume and dollar amounts.[199] Thus, his results led him to conclude that "the empirical evidence that I analyzed contradicts plaintiffs' hypothesis that the Ingenix Database '[r]eports charges that are systematically skewed downward.'"[200]

4. Dr. Noether's Analysis

136. Dr. Noether examined the suppression issue in her class cert report using two different approaches. First, she compared the percentiles in the CIGNA Healthcare Economics Datamart (HCE Datamart) for 2001-2008 with the percentiles for the Ingenix PHCS databases for 2002-2009.[201] The HCE Datamart is a repository for almost all medical and surgical claims received by CIGNA.[202] She used the May releases for the Ingenix PHCS databases to make sure that the billed charges matched up correctly (i.e., she compared the HCE Datamart from the prior year with the Ingenix PHCS database for the current year). Second, Dr. Noether compared the percentiles in the Ingenix 2008 PHCS database to the percentiles in three of the same benchmarks that Dr. Cantor used. The specific benchmarks consisted of the *Physicians' Fee*

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[196] *Ibid.*, p. 7.

[197] *Ibid.*, p. 8.

[198] *Ibid.*, pp. 9-10.

[199] *Ibid.*, p. 10.

[200] *Ibid.*, p. 4.

[201] Noether Class Cert Report, ¶ 139.

[202] *Ibid.*, ¶ 15.

Reference (PFR) database published by Wasserman Medical Publishers, the *Medical Fees in the United States* database published by Practice Management Information Corporation, and the *Medicare Part B Physician/Supplier Procedure Summary* database published by the Centers for Medicare and Medicaid Services (CMS). Her analysis differed from Dr. Cantor's in that it focused on 2008 instead of 2006 and 2007.

137. The results of both approaches showed that there was no systematic downward bias in the Ingenix PHCS database. For example, the results of her analysis using the HCE Datamart showed that, "[f]or the 80th percentile in particular, there were 4,927,445 year-CPT code-geozip combinations that [she] compared. For 71.7 percent of the combinations, the 80th percentile in the HCE Datamart was less than or equal to the 80th percentile reported in the Ingenix PHCS schedule."[203] Likewise, her results of the PFR benchmark showed that "there were 8,012 CPT codes (including CPT codes with modifier 26) for which the 90th percentile charge was reported in both the Wasserman PFR and the Ingenix PHCS database. For 29.9 percent of those CPT codes, the Ingenix 90th percentile was lower than the PFR 90th percentile, for 2.5 percent of those CPT codes the 90th percentiles were equal, and for 67.6 percent of those CPT codes the Ingenix 90th percentile was higher than the PFR 90th percentile."[204]

5. NERA's Analysis

138. My analysis of the suppression issue involved reviewing the programs and output that Dr. Foreman produced for his two CPT studies, replicating the results of those studies where possible, and then correcting the studies for the computational and other errors that I found in them. Although Dr. Foreman failed to produce the programs and output required to replicate all of his results, he produced somewhat more information for his 350 CPT Study than for his 300 CPT Study. Therefore, I began my analysis by examining his 350 CPT Study.

a. The 350 CPT Study

139. Using Dr. Foreman's basic framework, I selected the top 350 CPT codes and 450 geozips from the contributor data and compared the resulting percentiles to the corresponding

[203] Noether Class Cert Report, ¶ 141.

[204] *Ibid.*, ¶ 157.

Ingenix releases. In his 350 CPT Study, Dr. Foreman compares contributor data percentiles calculated from six months (or one year) of data to the Ingenix releases published just prior to that time period. However, this approach fails to address the suppression issue since the time period of the contributor data that Dr. Foreman compares does not match the time period of the contributor data used to create each Ingenix release. As such, his analysis cannot possibly address the issue at hand—i.e., did the Ingenix data processing systematically suppress the data distributions and the resulting percentile estimates in each release? Instead, he is infecting his analysis with the effects of prospective inflation, as he measures the output based on one period of data against the output from a later period of data. Therefore, to directly assess the impact of the alleged data "scrubbing" done by Ingenix prior to calculating the percentiles, I followed Dr. Foreman's methodology but made appropriate corrections for the mismatch of time periods. In particular, my staff and I selected claims lines from the 2006 to 2008 contributor data that aligned with the contribution window used to generate the Ingenix PHCS Releases 1 and 2 for 2007 and Release 1 for 2008.[205]

140. In addition to correcting the time periods used for selecting the contributor data, I corrected several important errors Dr. Foreman made in executing his 350 CPT Study. First, Dr. Foreman did not keep only claims corresponding to the medical and surgical modules (i.e., "proc code" equals "C"). Instead, he analyzed all claims for each CPT code, even if Ingenix assigned them to a different module. For example, claims for the same CPT code in various other settings (i.e., "proc code" equals "O," "N," "F," "I", or "U") may include a technical or facility charge in addition to the physician or professional fee making them much higher and not comparable to the claims in the medical and surgical modules.[206] Inclusion of these records can

[205] Contributors had to submit data by a certain date for the information to be included in the upcoming Ingenix release. For Ingenix's medical and surgical modules, the submission deadline was a little over two months before release. [INGENIXMDL000257716, INGENIXMDL000258775, and INGENIXMDL000545906] To identify the subscriber claims lines submitted in time for inclusion in a release, I used lookup tables based on submission identifiers and subscriber identifiers in the contributor data. ["submissions.txt" and "United Health Care Submissions 2006 2008.xls"] As such, the claim records may not match the time periods covered exactly since they are based on both when Ingenix received the data and the date of service. Also, the NERA analysis is limited to the three Ingenix PHCS releases since those are the only releases for which I have matching contributor data.

[206] The professional fee is the amount that the physician gets paid for providing the service or procedure, whereas the facility fee is the fee that the facility (e.g., hospital, ambulatory surgery center, etc.) gets paid for the use of its facility, equipment, and support services (such as nursing care).

dramatically distort the data, the distributions, and the percentile estimates. Dr. Foreman should have noted this obvious distortion in his results—for instance, his estimate of the 80th percentile for CPT 90935 (Hemodialysis, One Evaluation) in one geozip using the contributor data is 14,819 percent higher than the supposedly comparable Ingenix 80th percentile he compares it too. There are many examples like this in Dr. Foreman's results. For these obvious reasons, Ingenix does not include these claims in its medical and surgical modules. However, Dr. Foreman's mixing of the modules in calculating his contributor data percentiles significantly increases the appearance of suppression by Ingenix.

141. Second, Dr. Foreman did not use Ingenix's geozips in his contributor data.[207] Instead, he used the first three digits of the service zip code as the geozip, which matches many of the Ingenix geozips but is not always consistent with how Ingenix builds its geozips. Dr. Foreman's geozip subroutine also contained an error that caused him sometimes to create fictitious geozips, which then did not match any Ingenix geozip or sometimes matched the incorrect, Ingenix calculation. As a result of these missteps, almost 50 percent of his geozip approximations did not contain claims from the same geozip codes as the Ingenix data. [See Exhibit 8.] This different approach to identifying geozips does not reflect an attempt by Dr. Foreman to develop better definitions of the geographic market for physician services. Instead, these are simply errors in his programming. In contrast, as noted below, Dr. Foreman does a much better (though still flawed) job of matching the Ingenix geozips in his 300 CPT Study.

142. Third, Dr. Foreman did not properly count the number of units of each CPT when estimating the percentiles from the contributor data. Each claim line in the contributor data includes a field for the charge amount and a field for the number of units. The charge amount represents the charge per unit, even if the number of units is greater than one. To create the percentile values for each CPT-geozip combination, Dr. Foreman ranked the charges for a given CPT in a given geozip by the number of "claim lines" and then solved for the various percentiles

[207] Although Dr. Foreman acknowledged at his merits deposition that he did not attempt to use the Ingenix mapping to generate the geozips, he admitted that he was not certain what Mr. Cohen did. [Deposition of Stephen Foreman, November 1, 2010, p. 238] In addition, by defining the geozips differently than Ingenix, Dr. Foreman is basically engaging in an apples to oranges comparison. That is, if he is comparing a CPT-geozip combination and finds that the contributor percentile values are greater than the Ingenix percentile values, there is no way for him to know whether that result is due to the inclusion of outliers in the contributor data or to the contributor values covering a different geographic area than the Ingenix values.

by looking at the distribution of charges from those claim lines. However, there are often multiple units of the same CPT on each claim line. The proper measure of how many times a given CPT was performed at a given charge must include the number of units and not just the claim lines. Ingenix calls these "occurrences"—that is, the sum of each claim line times the units in that claim line.[208] The Ingenix percentiles are estimated based on occurrences. In correcting Dr. Foreman's analysis, I estimated the contributor data percentiles based on occurrences, not claim lines. Moreover, Dr. Foreman admitted in his merits deposition that the impact of units should be explored further, but he did not have time to do so before submitting his report.[209]

143. Fourth, Dr. Foreman neglected to remove duplicate records from his analysis of the contributor data. Clearly, this is a data-cleaning step that is common sense and uncontroversial. In fact, Dr. Foreman as well as Dr. Siskin, plaintiffs' statistical expert, both acknowledge that duplicates should be removed.[210]

144. Finally, for all radiology CPT comparisons, Dr. Foreman compared his contributor percentiles, based on both the professional and facility claim amounts, to Ingenix's percentiles for the professional component only of the procedure. Because the professional component represents only a portion of the total amount for a procedure, it is almost always less than the total claim amount for the professional-plus-technical CPT. Therefore, Dr. Foreman's results appear higher than Ingenix's percentiles for the radiology CPTs.[211] In essence, he has made the Ingenix percentiles appear to be too low by lumping in the facility charges in the contributor percentiles. But by doing so, he is not measuring any suppression in the percentile values for professional fees reported by Ingenix—he is simply measuring something different.

145. There are a variety of smaller corrections that my staff and I have made to Dr. Foreman's 350 CPT Study when re-estimating his results, such as applying the same number

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[208] For example, if the contributor data includes 1,000 claim lines for a given CPT-geozip combination and if the number of units for all of these claim lines equals 2,000 (i.e., an average of 2 units per claim line), then the number of occurrences for this CPT-geozip combination would equal 2,000.

[209] Deposition of Stephen Foreman, November 1, 2010, pp. 158-159.

[210] Declaration of Stephen Foreman, Ph.D., J.D., and M.P.A., August 23, 2010, ¶ 84 ("My 'methodology' would also eliminate duplicate claims.") and Deposition of Bernard R. Siskin, Ph.D., May 13, 2010, p. 233 ("Duplicate claims are errors, yes of course [they should be dropped]").

[211] Virtually all of the radiology CPTs are subdivided into professional and facility components.

of occurrences rule to both the Ingenix data and contributor data.[212] I describe these additional errors in the Data Appendix. Like the corrections listed above, however, none of these adjustments falls into the category of "data scrubbing" that plaintiffs challenge here. I simply re-estimated Dr. Foreman's analysis using his same basic approach, but with appropriate corrections to his programming and computations.

146. The results from my re-estimation of Dr. Foreman's 350 CPT Study, based on a comparison of the 80th percentiles, are summarized in Table 1 below. The "average difference" represents the simple average of the contributor data charge amount minus the Ingenix data charge amount for those CPT code-geozip combinations with greater than or equal to 255 occurrences, as Dr. Foreman did. Similarly, the "Ingenix values greater or equal" indicate the percentage of the CPT code-geozip combinations (again, with greater than or equal to 255 occurrences) that have the Ingenix data percentile charge amount greater than or equal to the corresponding contributor data percentile charge amount. The results show that correcting the errors in Dr. Foreman's approach and execution dramatically changes the conclusions. In particular, Dr. Foreman found sizeable average differences for each release, ranging from a low of $48.84 to a high of $102.94. In contrast, I found that after correcting the errors the true average differences are quite small, ranging from a low of $1.89 to a high of $3.47, which is only 1.2-2.2 percent of the average charge at the 80th percentile for the three releases studied.[213] Similarly, Dr. Foreman found that the Ingenix values equaled or exceeded the contributor data

[212] In performing his work, Dr. Foreman only kept those CPT code-geozip combinations with the number of occurrences equal to or greater than 255 based on the figures reported in the Ingenix databases. However, since he used a different methodology to clean the contributor data, he should have used the number of occurrences in the Ingenix databases to evaluate the Ingenix combinations and the number of occurrences in the contributor data to evaluate the contributor combinations. Even though the number of occurrences in the Ingenix database for a given combination could exceed 255, it might be the case that the number of occurrences in the contributor data for the same combination could be less than 255. This is one of the corrections that I made.

[213] 1.2 percent = ($1.89 / $154.74) * 100 and 2.2 percent = ($3.47 / $156.07) * 100. The weighted average differences are even smaller, ranging from -0.22 percent to 0.83 percent for the 80th percentile. The average differences of $1.89 and $3.47 represent simple averages over all of the CPT-geozip combinations. The underlying distributions, of course, include many instances where the contributor values are less than the Ingenix values. Also, the positive, average differences reflect some instances where the charge amounts in the contributor data are still much larger than the charge amounts in the Ingenix data even after correcting Dr. Foreman's errors. These differences, of course, could be due to coding errors or "true" outliers that remain in the data. However, it should be noted that not all of the average differences are positive. For example, in Exhibit 8, the majority of the simple averages and percentage weighted averages are negative below the 75th percentile.

values only about 37 percent of the time for the three releases, whereas I found that, after correcting the errors, the Ingenix values actually equaled or exceeded the contributor data values about 85 percent of the time.[214] Thus, the corrected results support the conclusion that there is no systematic downward bias in the Ingenix percentiles.[215]

Table 1 – Summary of Results for 350 CPT Study Based on 80th Percentile

	Average Difference		Ingenix Values Greater or Equal	
Release	Foreman	NERA	Foreman	NERA
	(1)	(2)	(3)	(4)
2007-1	$ 48.84	$ 3.06	37.4 %	84.8 %
2007-2	102.94	3.47	34.9	84.4
2008-1	90.38	1.89	38.7	85.7

147. Exhibit 9 presents the complete results for the average difference analysis for the 350 CPT Study. It reports results (1) for all of the percentiles in the Ingenix PHCS databases, including the 80th percentile, (2) for the weighted average as well as the simple average, and (3) weighting the contributor percentiles by the number of occurrences in the contributor data and not just the number of occurrences in the Ingenix data, as Dr. Foreman incorrectly chose to do. The exhibit shows that, regardless of (1) what percentile one is looking at, (2) whether the analysis is based on a simple average or weighted average, or (3) whether the weighted average is based on the Ingenix occurrences or the contributor occurrences, the results support the conclusion that there is no suppression in the Ingenix PHCS percentiles. For example, Dr. Foreman reported that the weighted average difference for the 90th percentile equaled 13.5

[214] 37 percent = (37.4 + 34.9 + 38.7) / 3 and 85 percent = (84.8 + 84.4 + 85.7) / 3.

[215] In general, there are two conditions that I would expect to find if systematic suppression had occurred. First, I would expect to find the contributor percentile values exceeding the Ingenix percentile values in the vast majority of the cases. If the contributor values exceed the Ingenix values but the number of times is modest and balanced by similar instances where the contributor values are *less than* the Ingenix values, then this would reflect the normal variation that one would expect to find and is not evidence of systematic suppression. Second, I would expect to find that the average difference between the contributor percentile values and the Ingenix values is large. If the difference is positive but small, this would again only reflect the normal variation that one would expect to see absent any systematic suppression. Dr. Foreman acknowledged this point in his merits deposition when he stated that he felt comfortable in his findings since the percentage difference he found was not small. [Deposition of Stephen Foreman, November 1, 2010, p. 225]

percent, 46.4 percent, and 49.5 percent, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. [See Exhibit 9.] In contrast, after correcting his errors, I found that the weighted average differences equaled only 1.76 percent, 2.01 percent, and 2.49 percent (based on Ingenix weights) and only 1.25 percent, 2.25 percent, and 2.53 percent (based on contributor weights). [See again Exhibit 9.]

148. The complete results for the Ingenix values greater or equal analysis for the 350 CPT Study are presented in Exhibit 10. The results include (1) counts as well as percentages and (2) greater, equal, or less than values broken out separately. Unlike the summary table above, Exhibit 10 reports the results in terms of the contributor values. That is, the greater, equal, or less values are indicating whether the contributor data charge amounts for the 80th percentile are greater, equal, or less than the Ingenix data charge amounts for the 80th percentile. Again, these results support the conclusion that there was no systematic downward bias in the percentiles. For example, the exhibit shows that Dr. Foreman found that 62.6 percent, 65.1 percent, and 61.3 percent of the total combinations, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1 had contributor values greater than Ingenix values. In contrast, after correcting his errors, I found that only 15.2 percent, 15.6 percent, and 14.3 percent of the total combinations had contributor values that exceeded the Ingenix values based on Dr. Foreman's 255 occurrences criteria.

b. The 300 CPT Study

149. Dr. Foreman's discussion of the 300 CPT Study in his merits report, my review of the limited information that he did produce, and my replication of his results demonstrate that the 300 CPT Study suffers from many of the same problems as the 350 CPT Study as well as some additional problems. The problems that are common between the two studies include: (1) incorrectly comparing contributor data from one time period with the Ingenix PHCS data from earlier time periods, (2) incorrectly including facility claims when comparing the results to the physician claims analyzed in the Ingenix PHCS percentiles for the medical and surgical modules, (3) incorrectly building the contributor distributions based on claim lines without counting the units associated with each claim line, and (4) incorrectly including duplicate records in the analysis. Likewise, the problems that are unique to the 300 CPT Study include: (1) not realizing that the Ingenix PHCS dental module corresponds to a different time period than the Ingenix

PHCS medical and surgical modules and (2) incorrectly reusing the same year of contributor percentiles to compare with different Ingenix PHCS releases. Finally, even though the 300 CPT Study used the Ingenix mapping to create its geozips, it still defined some of the geozips incorrectly.

150. In his merits report, Dr. Foreman says that the 300 CPT study "developed percentile values for the 300 most common procedure codes in 300 geozip areas selected at random."[216] However, my replication efforts and my review of the limited information that he produced indicate that the study was based on the top 300 geozips and not 300 geozips selected at random. For example, the Excel files that contain the results for the 300 CPT Study all say "top 300 GeoAreas."[217] I also found that over 90 percent of the geozips used in the Foreman 300 CPT Study matched the geozips found on the top 300 geozip list. Moreover, Dr. Foreman confirmed at his merits deposition that the geozips were not chosen at random.[218] Therefore, for purposes of re-estimating Dr. Foreman's analysis, I used the top 300 geozips. Similarly, even though he labeled this study the 300 CPT Study, it included dental and HCPCS codes, as well as CPT codes. It also did not include 300 codes for either set of services. Since Dr. Foreman used the results of the 300 CPT Study to estimate the overall average alleged suppression percentages that he used for calculating damages, since the number of CPT codes used to generate the results was less than 250 for each comparison period, and since the number of dental codes used to generate the results was less than 50 for each comparison period, I re-estimated his analysis using the top 300 CPT codes and the top 300 dental codes for each comparison period. This ensured that I would have a more representative sample, particularly for the dental codes.

151. Table 2 summarizes the results from my re-estimation of Dr. Foreman's 300 CPT Study based on a comparison of the 80th percentile values. Again, the results show that correcting the errors in Dr. Foreman's approach and execution dramatically changes the conclusions. For example, Dr. Foreman found sizeable average differences for each release,

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[216] Foreman Merits Report, ¶ 288.

[217] The full titles of the Excel files are "Ingenix 2006 contributor versus published for top 300 Codes and top 300 GeoAreas.xls," "Ingenix 2007 contributor versus published for top 300 Codes and top 300 GeoAreas.xls," and "Ingenix 2008 contributor versus published for top 300 Codes and top 300 GeoAreas.xls."

[218] Deposition of Stephen Foreman, November 1, 2010, pp. 113-114.

ranging from a low of $34.66 to a high of $40.63 for medical/surgical and from a low of $11.10 to a high of $20.53 for dental. In contrast, after correcting the errors, I found that the true average differences are much smaller, ranging from a low of $2.19 to a high of $4.40 for medical/surgical and from a low of $0.98 to a high of $3.16 for dental. The medical/surgical results represent only 1.5-3.0 percent of the average charge at the 80th percentile for the three releases studied.[219] Similarly, Dr. Foreman found that the Ingenix values for the three releases equaled or exceeded the contributor data values only 38.8 percent of the time for medical/surgical releases and only about 4.3 percent of the time for dental.[220] After correcting the errors, I found that the Ingenix values actually equaled or exceeded the contributor data values 84.2 percent of the time for medical/surgical and 62.6 percent of the time for dental.[221] Thus, the corrected results support the conclusion that there is no systematic downward bias in the Ingenix percentiles for either the medical and surgical modules or the dental modules.

Table 2 – Summary of Results for 300 CPT Study Based on 80th Percentile

	Average Difference		Ingenix Values Greater or Equal	
	Foreman	NERA	Foreman	NERA
	(1)	(2)	(3)	(4)
Medical/Surgical				
2007-1	$ 40.63	$ 4.04	34.2 %	83.9 %
2007-2	37.31	4.40	38.5	83.9
2008-1	34.66	2.19	43.8	84.8
Dental				
2007-1	20.53	3.16	2.5	56.6
2007-2	17.10	1.90	3.1	68.0
2008-1	11.10	0.98	7.4	63.1

152. Exhibits 11 and 12 present the complete results for the average differences analysis for the 300 CPT Study. They are in the same form as Exhibit 9 described above and

[219] 1.5 percent = ($2.19 / $142.35) * 100 and 3.0 percent = ($4.40 / $144.91) * 100.

[220] 38.8 percent = (34.1 + 38.5 + 43.8) / 3 and 4.3 percent = (2.5 + 3.2 + 7.3) / 3.

[221] 84.2 percent = (83.9 + 83.9 + 84.8) / 3 and 62.6 percent = (56.5 + 68.0 + 63.2) / 3.

differ according to the services being compared (i.e., medical/surgical versus dental). Again, the exhibits show that, regardless of (1) what percentile one is looking at, (2) whether the analysis is based on a simple average or weighted average, or (3) whether the weighted average is based on the Ingenix occurrences or the contributor occurrences, the results support the conclusion that there is no suppression in the Ingenix PHCS percentiles for either the medical and surgical modules or the dental modules. For instance, Dr. Foreman reported that the weighted average difference for the 70th percentile of the Ingenix medical and surgical modules equaled 12.8 percent, 18.5 percent, and 13.1 percent, respectively, for Releases 2007-1, 2007-2, and 2008-1. [See Exhibit 11.] In contrast, after correcting his errors, I found that the weighted average differences equaled only -0.15 percent, -0.07 percent, and 0.15 percent (based on Ingenix weights) and only -1.26 percent, -0.49 percent, and -0.34 percent (based on contributor weights). [See again Exhibit 11.]

153. The complete results for the Ingenix values greater or equal analysis for the 300 CPT Study are presented in Exhibit 13. They are in the same form as Exhibit 10 described above and include the results for both the medical and surgical comparison and the dental comparison. Again, these results support the conclusion that there was no systematic downward bias in the percentiles. For example, for dental, the exhibit shows that Dr. Foreman found that 97.5 percent, 96.9 percent, and 92.6 percent of the total combinations, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1 had contributor values greater than Ingenix values. In contrast, after correcting his errors, I found that only 43.4 percent, 32.0 percent, and 36.9 percent of the total combinations had contributor values that exceeded the Ingenix values.

154. In his merits report, Dr. Foreman takes the weighted average differences from the 300 CPT Study for all of the percentiles and releases to create an alleged "downward bias" percentage for the Ingenix PHCS medical and surgical modules and for the Ingenix PHCS dental modules. Using the same methodology that he used and the corrected results from Exhibits 11 and 12 described above, I re-estimated the alleged "downward bias" percentages.[222] Table 3

[222] Exhibits 14 and 15 show the details of the estimation. It involves weighting the average difference for each percentile by the percentage of adjudications based on those percentiles in the Aetna ACAS claims. [See Foreman Merits Report, pp. 103-104.] Also, it should be noted that Dr. Foreman used a different methodology to derive the average differences for his medical/surgical "downward bias" analysis than he used for his dental

summarizes the results. It shows that the corrected results reduce the alleged "downward bias" percentage for the medical and surgical modules from 11.20 percent to only 0.97 percent. Likewise, the table shows that the corrected results reduce the alleged "downward bias" percentage for the dental modules from 9.80 percent to only 1.01 percent. These small percentages are inconsistent with there having been a systematic suppression of the percentiles in the Ingenix PHCS medical and surgical modules or dental modules.

Table 3 – Summary of Results for Alleged "Downward Bias" Analysis Based on 300 CPT Study

	Foreman	NERA
	(1)	(2)
Medical/Surgical	11.20 %	0.97 %
Dental	9.80	1.01

c. Comparison of 300 CPT Study and 350 CPT Study

155. Because Dr. Foreman's two studies are each supposed to reflect a careful analysis of a representative (and very similar) sample of CPT code-geozip combinations, the results of each study should be the same, as in the case of 2007 comparisons, or very close, in the case of the 2006 and 2008 comparisons.[223] That is, his contributor percentile estimates in the two studies should be statistically and materially the same for 2007 and extremely close for 2006 and 2008. In fact, Dr. Foreman argued in his merits report that the results of his 300 CPT Study were consistent with those of his 350 CPT Study. As support for this proposition, he presented a table that supposedly compared the CPT-geozip combinations across the two studies.[224] However, the results in his table do not make sense.[225] For instance, the table indicates that the average difference for the 80th percentile equals $4.12. It also indicates that this corresponds to a 0.1 average percent difference. Assuming that the average percent difference reflects the amount of

"downward bias" analyses. [See Foreman Merits Reports, Tables 29 and 32] I have adopted his methodologies and not tried to reconcile the differences between them.

[223] The 2007 comparisons are the only ones that use the same time period for both studies.

[224] Foreman Merits Report, Table 27.

[225] It should be noted that Dr. Foreman produced no programs or files related to Table 27. Moreover, he admitted at his merits deposition, that the backup table for Table 27 is lost. [Foreman Deposition, November 1, 2010, p. 242]

the 80th percentile, this means the average percentile amount would equal $4,120.[226] However, if you look at the 80th percentile amounts for the top 100 procedure codes in Dr. Foreman's Data Appendix 2, none of those amounts comes even close to the $4,120 figure.

156. Dr. Foreman uses Table 27 in his merits report to demonstrate that the average differences in his contributor percentile estimates is very low compared to the differences he finds between the Ingenix percentiles and his contributor estimates. The differences in Foreman Table 27 range from $4.01 to $5.64. It is important to note that the average percentile differences between the contributor percentile estimates and the Ingenix estimates that I find in the corrected versions of Dr. Foreman's 300 CPT Study and his 350 CPT study are lower than that range in 38 out of 48 estimates.[227] I take this to mean that Dr. Foreman would agree that, when corrected, his CPT Studies show that there has been no material suppression in the data processing done by Ingenix because the differences are not material.

157. Similar to the findings in Foreman Table 27, if you compare the greater, equal, and less than results for the 300 CPT Study that Dr. Foreman reports in Table 22 of his merits report with the results for the 350 CPT Study that he reports in Table 26, the results are much different. Table 4 below summarizes these differences for the Ingenix PHCS Releases 2006-2 and 2007-1. For instance, Table 4 shows that the differences for the values at the 80th percentile range from a negative 8.8 percent to a positive 10.3 percent. This is a large swing for two studies that should produce very close results. Although I would expect there to be some minor differences since the two studies do not use all of the same CPT-geozip combinations, I would not expect the differences to be this large if the two studies were really consistent with each other.

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[226] $4,120 = $4.12 / 0.001.

[227] This calculation is based on taking all of the NERA average differences in Exhibits 8 and 10 and determining how many of them are less than the upper end of Dr. Foreman's range. That is, 38 of the 48 NERA average differences are less than $5.64.

Table 4 – Comparison of Qualitative Results for 300 CPT and 350 CPT Studies

Medical and Surgical Claims

		Greater			Equal			Less		
Contributor	Ingenix	300 CPT	350 CPT	Difference	300 CPT	350 CPT	Difference	300 CPT	350 CPT	Difference
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2007_	2006_2	69.3 %	59.0 %	10.3 %	16.5 %	25.3 %	-8.8 %	14.2 %	15.7 %	-1.5 %
2007_	2007_1	65.8	62.6	3.2	20.1	23.0	-2.9	14.0	14.4	-0.4

158. Perhaps there is a more obvious explanation for the differences in the results of his two studies. During his merits deposition, Dr. Foreman stated that he did the programming for the 350 CPT Study, whereas Mr. Cohen did the programming for the 300 CPT Study.[228] Dr. Foreman also admitted that he did not check Mr. Cohen's programming and underlying work.[229] This helps explain why some of the computational and other errors that I found differ across the two studies. For instance, as described above, the method that Dr. Foreman used to generate the geozips for the 350 CPT Study differs from the method that Mr. Cohen used for the 300 CPT Study.

159. Finally, Table 5 below compares the 80th percentile values in 2007 for the CPT-geozip combinations that appeared in Dr. Foreman's two CPT studies and in NERA's two CPT Studies.[230] I chose the results for 2007 because this is the only year where both the 300 CPT Study and the 350 CPT Study analyze the full year of contributor data. Therefore, the percentile values for 2007 should be identical. I created the table using the results found in Dr. Foreman's backup materials for Tables 19 and 25 of his merits report, as well as the results that I generated after correcting the errors that I found in the two studies.[231] As can be seen from Table 5, the percentile values for Dr. Foreman differ across his two studies for the exact same CPT-geozip combinations, which should not happen. For example, the results show that the 80th percentile

[228] Deposition of Stephen Foreman, November 1, 2010, pp. 48, 50, 89, and 142.

[229] *Ibid.*, p. 50.

[230] The complete results for all of the percentiles are presented in Exhibits 16 and 17.

[231] Table 19 shows the results for his 300 CPT Study, whereas Table 25 shows the results for his 350 CPT Study. Also, Dr. Foreman reports two sets of results for 2007 in Table 19 of his merits reports: (1) contributor 2007 and Ingenix 2006_2 and (2) contributor 2007 and Ingenix 2007_1. The comparison in Table 5 reflects the first set of results. The comparison for the second set of results is basically the same. [See Exhibit 15.]

values match only 28.7 percent of the time across his two studies. Moreover, I found an average percent difference of 4.55 percent for the 80th percentile, as opposed to the 0.1 percent difference reported by Dr. Foreman in Table 27 of his merits report. In contrast, the values based on my re-estimation are the same across the two studies. This demonstrates that the results of the 300 CPT Study and 350 CPT Study reported in Dr. Foreman's merits report are not consistent with each other since these values differ. It also demonstrates that the 300 CPT Study and 350 CPT Study generate consistent results once all of the errors in Dr. Foreman's approach and application are fixed. Simply put, Dr. Foreman's results are not accurate or consistent, and cannot be considered reliable.

Table 5 – Comparison of Overlapping CPT-Geozip Combinations Based on 80th Percentile

	Foreman	NERA
Overlapping Combinations	31,923	88,962
Overlapping Combinations with Equal Percentiles	28.67 %	100.00 %
Average Difference	$ 4.21	$ 0.00
Average % Difference	4.55 %	0.00 %

6. Conclusion

160. There have been five different analyses that have examined whether the percentiles in the Ingenix databases were systematically suppressed by the data processing methods used by Ingenix. All of these analyses, except for Dr. Foreman's clearly flawed estimates, have found that there was no systematic downward bias in the percentile estimates. As such, the weight of the evidence clearly supports the conclusion that the Ingenix databases were not suppressed. This has two very important implications. First, there is no basis for Dr. Rausser to claim that there is any kind of conspiracy—explicit or tacit, antitrust or RICO—based on statistical evidence of systematic suppression. Second, and more broadly, without evidence of systematic suppression, there can be no liability or damages based on any cause of action since there is no basis to claim that systematic underpayment results from Ingenix's data processing or any activity of defendants like Aetna.

B. Dr. Rausser's Plus Factors Are Consistent with Independent, Unilateral Behavior

161. In his declaration, Dr. Rausser says that he has "also identified several 'plus factors' that are traditional indications of concerted action. These include: (1) commoditization of the underlying products, (2) the existence of monitoring mechanisms that offered efficient price communication among conspirators, (3) the absence of any threat of disclosure or competition by non-complying insurers, (4) the failure of major health insurers to compete with Ingenix in the data market, and (5) the failure of health insurers to disclose their methods of determining UCRs and to compete based upon UCRs as they do with other policy provisions."[232] Although I do not agree with all of his characterizations of these so-called plus factors, even if true, their adoption would still be consistent with the independent, unilateral self-interest of the alleged conspirators. I comment on each of these factors below.

1. The Underlying Products Are Not Commoditized

162. Health plans are highly differentiated products, especially those selected by employers that decide to tailor the benefit designs to their preferences. Although many health plans contain the same general properties (e.g., premiums, co-payments, co-insurance, deductibles, covered services, non-covered services, size of provider networks, out-of-pocket maximums, etc.), those properties can differ dramatically from plan to plan. In particular, self-funded plans are often essentially customized plans, and even fully-insured plans have a substantial number of options that allow an employer to set the terms to achieve a balance of an affordable premium and attractive benefits. As such, most market observers (including the federal antitrust agencies) consider health insurance products to be highly differentiated.[233]

163. Dr. Rausser instead asserts that health insurance products are commoditized.[234] In pointing out the "highly standardized" nature of health plan provisions, Dr. Rausser offers a partial quote from an article that says: "Health insurance had seen no meaningfully different

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[232] Declaration of Gordon Rausser, Ph.D., August 23, 2010, ¶ 46.

[233] See, e.g., U.S. Department of Justice, "Background to Closing of Investigation of UnitedHealth Group's Acquisition of Oxford Health Plans," news release, July 20, 2004. See also Federal Trade Commission and U.S. Department of Justice, *Improving Health Care: A Dose of Competition*, July 2004, Chapter 6.

[234] Rausser Merits Report, ¶ 100.

substitute products since the HMO was introduced thirty years ago."[235] However, in the more complete quote, the article's author states: "The most radical form of competition comes from substitute products rather than from new purveyors of existing products, as when the personal computer replaced the typewriter. Health insurance had seen no meaningfully different substitute products since the HMO was introduced thirty years ago."[236] It is clear the article's author is referring to "the most radical form of competition," such as when word processing moved from the typewriter to the personal computer. Clearly, personal computers are not a product area lacking in innovation and product variety and neither are health plan products, as anyone who has had to choose among plans knows. There have been significant changes in health plan rivals, health plan products and health plan designs over those thirty years since the advent of the HMO.

164. Human Resource (HR) departments of many firms reflect the enormous variety of health plans available. They hire consultants, agents, or brokers just to solicit bids and evaluate proposals. There is a large industry that exists to advise firms about choosing the best health benefits to offer employees while still controlling health care costs. Further, insurers and firms often hold health "fairs" to showcase the different offerings and to explain differences among plans. HR departments also produce lengthy comparison tables listing each plan's similarities and differences, and provide complex "personal calculators" to determine which plan might minimize total out-of-pocket costs for each employee. For small group and individual coverage there is also a wide variety of benefit designs to choose from, as can be found on-line. For all potential subscribers, these plans include many different network options, including a variety of in-network and out-of-network provisions. There is enormous heterogeneity in the health insurance industry.

165. Dr. Rausser does not relate this allegedly "facilitating" property of health insurance to any mechanism used by the alleged conspiracy. In fact, it is irrelevant to him whether one insurer chooses the 75th percentile or the 90th percentile. Thus, heterogeneity may not matter to his expansive view of the alleged conspiracy. Even if Dr. Rausser were correct in

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[235] *Ibid.*, ¶ 100.

[236] J.C. Robinson, "Consolidation and the Transformation of Competition in Health Insurance," *Health Affairs* Vol. 23, No. 6, (2004), p. 20.

his assertion that health insurance products are commoditized (which they are not), this would not be evidence that an alleged conspiracy has taken place. In a competitive market, firms will tend to adopt many of the same "best practices" or risk losing business. This is often driven by the buyers through the RFP process. Therefore, the health plans may have each adopted the same general properties because those properties are the most demanded or most efficient and not because they make it easier to conspire.

2. The Ingenix Databases and COB Process Pre-Date the Alleged Conspiracy

166. In his merits report, Dr. Rausser says that, "[c]ommunication among insurers is uniform, precise and complete using the Ingenix published schedules as well as other information flows peculiar to the insurance industry"[237] In essence, he is arguing that the alleged conspirators adopted the Ingenix databases is so they could conspire. A much more believable explanation is that the alleged conspirators each adopted the Ingenix databases because these data represent the most efficient means of obtaining charge information. As Dr. Cross explained, this is the reason why Aetna started using the PHCS database in 1996.[238] Moreover, many of the companies (such as Aetna) started using the databases prior to Ingenix acquiring them. Thus, the use of the databases had nothing to do with the alleged conspiracy.

167. As mentioned above, the COB process does not represent an effective means of monitoring the alleged conspiracy since it is not always possible to tell which method (e.g., Ingenix databases, wrap networks, bill negotiations, etc.) the primary payer used to determine the allowed amount and since the primary payer may be offering multiple percentiles to its customers, making it hard to define, much less identify, cheating on the conspiracy. In addition, the COB process is heavily regulated and the companies adopted the process because they had to and not so they could conspire. Finally, as in the case of the PHCS and MDR databases, the COB process pre-dates the beginning of the alleged conspiracy by many years. In fact, insurers

[237] Rausser Merits Report, ¶ 102.

[238] Declaration of James Cross, M.D. (Head of National Medical Policy and Operations for Aetna), June 30, 2010, ¶¶ 12 and 17.

first began using the COB process in the 1960s.[239] Finally, Dr. Rausser acknowledges that he has no evidence of the COB process ever being used as a monitoring device.[240]

3. The Alleged Conspiracy Did Not Have the Ability to Punish or Discipline Cheaters

168. Dr. Rausser asserts in his report that "defendants were unlikely to face cheating or defection from other insurers who used Ingenix. Any such efforts would be readily detectable and could be easily punished by exclusion from further use of Ingenix products."[241] However, there are two problems with this assertion. First, Dr. Rausser never makes clear what cheating is or what effect it has on his loosely defined conspiracy. Again, Dr. Rausser indicates that the alleged conspirators can choose any percentile they want and it is consistent with the conspiracy holding. Likewise, it is apparently consistent with Dr. Rausser's notion of conspiracy for the alleged conspirators to not even use Ingenix data for large portions of their out-of-network benefits determinations (as was the case for Aetna and CIGNA). Presumably, they can also choose various combinations of out-of-network coinsurance, deductibles, and maximums. Second, cheating or defection would not be readily detectable. How does the conspiracy distinguish which alleged conspirator and what percentile constitutes cheating if any choice is consistent with advancing the conspiracy? Further, as explained above, the COB process does not represent an effective means of monitoring the alleged conspiracy. Third, the ability to discipline the cheaters by withholding the Ingenix databases from them does not seem like much of a threat since, if the conspirators are cheating, this suggests that they are using some other method besides the Ingenix databases anyway. Thus, the loss of the databases would not threaten or impact the cheater's behavior.

4. The Major Health Insurers Had No Incentive to Enter the Data Market

169. In his merits report, Dr. Rausser claims that Aetna and CIGNA should have entered the Data Market and competed against Ingenix.[242] This conclusion assumes that (1)

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[239] J.B. Helitzer, "COB in the 1980s: How and Why It Works," *Benefits Quarterly,* Second Quarter (1985).

[240] Declaration of Gordon Rausser, Ph.D., August 23, 2010, ¶ 52.

[241] Rausser Merits Report, ¶ 106.

[242] *Ibid.*, ¶¶ 17 and 108.

Ingenix was earning supranormal profits in the Data Market as a result of exercising its market power and (2) there was enough room in the Data Market for significant other competitors. First, there is no evidence that the UCR data operation within Ingenix was making supranormal profits. In fact, the revenues that Ingenix earned from licensing the PHCS and MDR databases in 2005 and 2006 represented only 2.4 percent of the total revenues that Ingenix earned from all of its operations during those years.[243] Second, as discussed above, there is no evidence that Ingenix had exercised market power in the Data Market or that a different market structure for the Data Market would exist in the but-for world anyway. Third, the Data Market may not be able to support more than a few firms given the scale efficiencies of producing large amounts of reliable charge data profiles. Fourth, perhaps the most obvious reason to reject Dr. Rausser's assertion here is that Aetna chose to move to PHCS two years before the alleged conspiracy began. Aetna adopted PHCS as its data vendor before PHCS was sold to Ingenix and before the alleged conspiracy was formed. Therefore, the record indicates that it was in Aetna's (and presumably CIGNA's) own independent, self-interest not to enter the Data Market.

5. The Ingenix System Is Not a Black Box

170. Dr. Rausser alleges that the Ingenix system is a "black box" for members and providers who do not know how the UCRs are determined.[244] However, as discussed above in my background section, many employers are well informed about how their employees' claims are processed and paid, both on an in-network and an out-of-network basis.[245] These employers are sophisticated purchasers who, by themselves or with the help of their benefits consultants, would not be easily duped by any scheme to artificially lower out-of-network reimbursement amounts if those amounts had any material effect on their employees' access to out-of-network care. Moreover, these employers have no need for such a scheme, since if they wished to have their out-of-network claims reimbursed at a lower level, they could simply change the terms of

[243] 2.4 percent = [($22,204,116 + $19,882,763) / ($796,000,000 + $956,000,000)] *100. [INGENIXMDL000070619 and UHG Form 10-K filed February 21, 2008, p. 85]

[244] Rausser Merits Report, ¶¶ 104-105.

[245] For example, the Benefits Manager for Owens Corning stated that "Over the years, I have had numerous opportunities to evaluate actual reimbursement levels set for specific claims in comparison to amounts billed by providers. Owens Corning has always viewed the use of the database to be a reasonable way to apply its R&C limitations." [Declaration of Chris Saulsberry (Benefits Manager for Owens Corning), June 29, 2010, ¶¶ 18-19, and 21]

their plan to do so explicitly (e.g., change the percentile of a charges database, change the copayment/deductible terms relating to their out-of-network plans, or change to an entirely different basis of reimbursement).

171. Similarly, providers are not in the dark about out-of-network payment levels. It is relatively easy for most providers to compare the reimbursement levels they receive from different health plans for their most frequently-used CPT codes. This is particularly true for providers who work with practice management companies. These companies handle claim submissions and appeals for many providers and they can use third-party benchmarks to assess the reasonableness of the payments received as a result of Ingenix-based determinations. As Dr. Cantor has shown, there are several available benchmarks that can be used to conduct such evaluations. Aetna finds that "[p]roviders generally appeal a higher volume of claims than members, and some providers appeal every claim determination as a matter of course and use practice management companies to handle their appeals."[246] In addition, Aetna provides UCR rates and detailed information on particular services to members, providers, or their representatives who seek this information. This includes information about the source of Aetna's UCR methodology and data pertaining to a specific claim.[247] Moreover, it is much less relevant that the out-of-network provider knows the UCR information. These providers can always leave the reimbursement process to the patient and the insurer and balance bill the patient for any shortfall. The provider has control over his/her pricing.

172. Dr. Rausser also argues that the insurers should advertise how their out-of-network reimbursements are set to attract more subscribers.[248] This is unnecessary. Insurers offer a choice of what out-of-network rates employers want to use, so the tradeoff between premiums and deeper coverage of out-of-network costs is just one of many coverage choices a firm can make. Aetna certainly does this.[249] Most Aetna plan sponsors already have a choice of the percentiles they want to set for out-of-network reimbursement, and they understand the

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[246] Declaration of Michelle D. Ferensic-Smith (Aetna's Vice President for Claim and Provider Service Operations), June 28, 2010, ¶ 33.

[247] *Ibid.*, ¶¶ 62-63.

[248] Rausser Merits Report, ¶ 17.

[249] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, Exhibit 20.

tradeoffs. Further, it is simply not clear that advertising would attract more members. While low UCRs help control costs, higher out-of-network payments raise medical expenses paid out and, by derivation, premiums or self-insured medical expenses. However, high UCRs may attract a better workforce for the company. Then again, high UCRs also may attract members who want to use out-of-network providers more frequently, possibly creating an adverse selection problem for the company. So it is not clear that this is an insurance attribute that should be the focus of advertising. The simple conclusion is that each firm must decide which balance it wants to strike. As discussed above in the Amgen example, out-of-network reimbursements and out-of-network claims management are choices that are discussed when plan sponsors want to control their expenses or want to predict their medical expenses when insurers bid for their self-insured business. Finally, this alleged lack of advertising is irrelevant to the conspiracy and does not reflect the alleged conspirators working against their interests. It is simply irrelevant to argue that insurers should advertise the availability of high UCR percentiles when a wide range of percentiles, both high and low, is routinely offered.

C. Other Information Also Indicates that the Alleged Conspiracy Has Not Taken Place

1. Aetna Paid Most Out-of-Network Claims at Billed Charges

173. Mr. James LaPorta of Aetna did an analysis of out-of-network claims subject to Ingenix-based fee schedules.[250] To conduct his analysis, he used the non-HMO claims in Aetna's Automated Claims Adjudication System (ACAS). He found that, during the 2002 to 2008 period, Aetna's out-of-network claims represented 13.6 percent of all non-HMO claims.[251] He also found that, during the 2002 to 2008 period, the number of out-of-network claims that were paid using some other method (such as the custom fee schedules used by Verizon and the Texas Teachers Retirement System) ranged from 12.9 to 21.9 percent.[252] Finally, Mr. LaPorta

[250] Declaration of James LaPorta (Medical Economics Manager in Health Care Management for Aetna), July 1, 2010, ¶ 3. Mr. LaPorta's analysis covered the 2001 to 2008 period. However, I have not used his results for 2001 since counsel informed me that there could be a problem with the data for that year due to Aetna changing its computer system.

[251] *Ibid.*, Exhibits B-H.

[252] *Ibid.*, Exhibits B-H. The percentage for 2001 equaled 68 percent.

found that, during the 2002 to 2008 period, Aetna paid 82.8 percent of the out-of-network claims subject to Ingenix-based fee schedules at full billed charges.[253]

174. Mr. LaPorta's finding regarding the full billed charges is not what you would expect to see if Aetna had been engaged in a conspiracy to reduce out-of-network reimbursements. Instead, you would expect to see a much smaller percentage of the out-of-network claims paid at full billed charges. Otherwise, Aetna would not have benefited from participating in the alleged conspiracy. Given that Aetna paid over 80 percent of its out-of-network claims that used the Ingenix databases at full billed charges, on its face, this is inconsistent with the alleged conspiracy having taken place.

2. The Alleged Conspirators Used Other Methods Besides the Ingenix Databases to Reimburse for Out-of-Network Services

175. In his merits report, Dr. Rausser only focuses on the Ingenix databases. Importantly, he does not consider the other methods that insurers use to pay for out-of-network healthcare services. These other methods include wrap networks, bill negotiations, Medicare-based fee schedules, and other fee schedules. Assuming that the alleged conspiracy based on the use of the Ingenix databases had taken place, I would expect to see that the alleged conspirators had used these databases to pay for the vast majority (if not all) of their out-of-network claims.

176. However, this did not occur for either CIGNA or Aetna. The available information shows that CIGNA paid more than 92.5 percent of its out-of-network medical and surgical claims between 1998 and 2008 at full billed charges or by using methods other than the Ingenix databases.[254] In addition, the percentage of out-of-network claims that Aetna paid using other methods ranged from 12.9 to 21.9 percent during the 2002 to 2008 period.[255] Again, these are not the results that you would expect to see if an alleged conspiracy to reduce out-of-network

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[253] *Ibid.*, Exhibits B-H.

[254] Noether Class Cert Report, ¶¶ 10, 36, and 248-249. According to Dr. Noether, the other methods include (1) the use of a wrap network, (2) the use of bill negotiations, and (3) the use of differing methodologies for calculating the maximum reimbursable amounts, including the use of a Medicare-based fee schedule and the use of CIGNA-proprietary methodology. [Noether Class Cert Report, ¶ 248]

[255] Declaration of James LaPorta (Medical Economics Manager in Health Care Management for Aetna), July 1, 2010, Exhibits B-H. Mr. LaPorta's analysis covered the 2001 to 2008 period. However, I have not used his results for 2001 since counsel informed me that there could be a problem with the data for that year due to Aetna changing its computer system. His percentage for 2001 equaled 68.1 percent.

reimbursements via Ingenix had actually taken place. Moreover, these alternatives show why Ingenix does not have significant market power despite its high share of the UCR charges data segment of the data information market.

3. The Profitability and Medical Loss Ratios for the Alleged Conspirators Have Differed Dramatically Over the 1998 to 2009 Period

177. The general purpose of joining a conspiracy is to improve both the level and certainty of profits for the health insurance company over what could have been earned by competing and not cooperating with the conspiracy.[256] If there is no expected gain, there is no incentive to cooperate rather than compete. In essence, a health insurance company would join a conspiracy only if it could achieve greater profits from collective activity than from competition. If there were a conspiracy underway among the health insurers to suppress reimbursement for out-of-network services, I would expect to see health insurers realizing higher and stable profit margins and lower and stable medical loss ratios.[257] I would also expect that each insurer's profit margins and medical loss ratios would improve in a similar manner, otherwise those insurers that felt they were not benefiting from the conspiracy as much as others would tend to destabilize the conspiracy by trying to get a greater share of the economic rents.

178. In his merits report, Dr. Rausser says that the alleged conspiracy has resulted in the health insurers earning higher profits and incurring lower medical loss ratios—although he acknowledges that these strong results are certainly not attributable only to the supposedly suppressed reimbursement rates.[258] However, in discussing these results, he focuses primarily on the performance of the industry as a whole and not the performance of the individual insurers. As such, his results may be misleading since the individual insurers may have differed

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[256] See, e.g., D. Carlton and J. Perloff, *Modern Industrial Organization* 5th ed. (New York: Pearson Addison-Wesley, 2005), Chapter 5; A. Jacquemin and M. Slade, "Cartels, Collusion, and Horizontal Merger," in R. Schmalensee and R. Willig, *Handbook of Industrial Organization* Vol. 1 (Amsterdam: North Holland, 1989); G. Stigler, "A Theory of Oligopoly," *Journal of Political Economy* 72 (1964); and, L. Pepall, D. Richards, and G. Norman, *Industrial Organization: Contemporary Theory and Practice* 2nd ed. (Mason, OH: Southwestern, 2002), Chapter 7.

[257] A medical loss ratio just represents the ratio of total medical costs to total premiums. It is just another measure of profitability. That is, the lower the medical loss ratio, the higher the profits.

[258] Rausser Merits Report, ¶¶ 74-79.

dramatically in their performance, which would be generally inconsistent with their having participated in an alleged conspiracy.

179. To evaluate this issue, I examined profit margins and medical loss ratios for the seven largest for-profit insurers during the 1998 to 2009 period. These insurers include Aetna, Anthem/WellPoint, CIGNA, Coventry, Health Net, Humana, and United.[259] I focused on these insurers since they all utilized the Ingenix databases, their performance information for the most part was available through their 10-Ks, and Dr. Rausser highlighted five of them in his report (i.e., Aetna, Anthem/WellPoint, CIGNA, Health Net, and United).

180. Exhibits 18-21 present the results of my profit margins analysis. They differ according to the specific definition of the profit margin (i.e., operating margin, EBITDA margin, net margin before extraordinary items, and net margin including extraordinary items).[260] In contrast to Dr. Rausser's assertion, the exhibits show that the alleged conspirators have not all experienced strong and stable profitability. For example, Exhibit 18 shows that Aetna's operating margin started out at 6.3 percent in 1998, dropped to a low of negative 0.9 percent in 2001, increased to a high of 11.5 percent in 2005, and then ended at 6.2 percent in 2009. Likewise, Exhibit 18 shows that Health Net's operating margin started out at a negative 1.9 percent in 1998, increased to a high of 5.0 percent in 2003, and then dropped to 0.1 percent in 2009. Finally, Exhibit 18 shows that United's operating margin started out at a low of negative 0.2 percent in 1998, increased to a high of 10.9 percent in 2005, and then ended at 7.3 percent in 2009.

181. The results of my medical loss ratio analysis are presented in Exhibit 22. Again, they show that the alleged conspirators have not all experienced low and stable medical loss ratios. In particular, Exhibit 22 shows that Aetna's medical loss ratio started off at 85.6 percent in 1998, increased to a high of 90 percent in 2001, dropped to a low 76.6 percent in 2003, and ended at 85.2 percent in 2009. Likewise, Exhibit 22 shows that Coventry's medical loss ratio started off at a high of 86.9 percent in 1998, dropped to a low of 79.4 percent in 2005, and ended

[259] I refer to Anthem/WellPoint instead of just WellPoint since Anthem acquired WellPoint in 2004 and then changed its name to WellPoint.

[260] EBITDA stands for earnings before interest, taxes, depreciation, and amortization. It is often thought of as a measure of cash flow.

at 85.4 percent in 2009. Finally, Exhibit 22 shows that United's medical loss ratio started off at a high of 87.2 percent in 1998, dropped to a low 80.0 percent in 2005, and ended at 82.3 percent in 2009.

VII. THE ALLEGED CONSPIRACY HAS NOT HARMED COMPETITION

A. Provider Services Markets

182. According to Dr. Rausser, "[t]he factual evidence reveals that the market in which injury occurs is that for reimbursement of out-of-network health and dental services."[261] It is my understanding, however, that the plaintiff providers are only in this case because some of them have taken assignment from the subscribers and are seeking to be paid the "true" allowed amounts that they believe the insurers should have authorized for the out-of-network healthcare services. Importantly, the providers have not been directly injured in economics terms since they have always had the right to balance bill the patients to make up the difference between the "true" allowed amounts and the allowed amounts that the insurers authorized. Because of the ability to balance bill, the alleged conspiracy could not have harmed the markets for provider services with respect to out-of-network reimbursements.

183. Dr. Rausser also claims that the provider services markets have been harmed as a result of the alleged conspiracy forcing out-of-network providers to become in-network providers.[262] He has failed, though, to provide any evidence that this has actually occurred or that this fact is evidence of a conspiracy. Provider markets moved away from indemnity/out-of-network products to network based products long before the alleged conspiracy. Moreover, Dr. Rausser seems to believe that providers are either all in-network providers or all out-of-network providers.[263] This is incorrect. As the depositions of the named plaintiff providers indicate, most providers are in-network for some health plans (or at times have been) and out-of-network for other health plans.[264] As such, there is no evidence that the alleged conspiracy has

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[261] Rausser Merits Report, ¶ 32.

[262] *Ibid.*, ¶¶ 14 and 35.

[263] *Ibid.*, ¶¶ 57-58.

[264] See, e.g., Deposition of Brian Mullins (Physician Therapist), February 22, 2010, p. 124 and Deposition of Frank G. Tonrey, M.D. (Anesthesiologist), February 22, 2010, pp. 49, 101-102, and 105-107.

harmed competition in the provider services markets by forcing out-of-network providers to become in-network providers. In fact, to the extent this evolution has continued through the period of the alleged conspiracy, it is a reflection of the market for provider services becoming more competitive. It reflects a market at work, not a conspiracy.

B. Health Insurance Markets

184. As mentioned above, plaintiffs claim that the goal of the alleged conspiracy was to reduce reimbursements for out-of-network healthcare services. Because the plaintiff providers have always had the ability to balance bill, this means that the only plaintiffs the alleged conspiracy possibly could have directly injured in economics terms are the plaintiff subscribers. Although Dr. Rausser suggested that the injury took place in the provider services market, this is not the correct way to think about it. Economically, what the plaintiffs might more logically claim is that there has been a harm to competition in the health insurance markets since the alleged conspiracy supposedly allowed the health insurers and self-insured employers to reduce the level of benefits that the subscribers bought with their premiums. That is, the alleged conspirators may have reduced the level of benefits by making the subscribers pay more for out-of-network healthcare services than was seemingly promised.

185. For competition to have been harmed in the health insurance markets through a reduction in the level of out-of-network benefits, it has to be the case that (1) the alleged conspiracy suppressed the percentiles in the Ingenix databases; (2) the buyers of out-of-network coverage do not understand and do not monitor their out-of-network benefits in an effort to balance subscriber/employee satisfaction with the offered coverage and the need to control out-of-network costs; (3) this resulted in allowed amounts being less than what would be found under independent, self-interested competitive conditions; *and* (4) the insurers and self-insured employers did not pass on the cost savings from the lower reimbursements to the subscribers in the form of lower premiums (though this is a very puzzling notion for self-insured firms who could just drop the out-of-network coverage if cutting costs was all they were interested in doing). That is, even though plaintiffs' experts focus all of their attention on suppression of the percentiles, suppression is only a necessary but not sufficient condition for there to be a harm to competition. Dr. Rausser must show that the resulting, allegedly suppressed reimbursements are not rates that reflect market conditions or would have resulted anyway in the absence of the

alleged Ingenix suppression. This is because the insurers and self-insured employers could have set the UCR rates at high enough levels—even if the percentiles were suppressed—to ensure that the allowed amounts remained consistent with market rates that are broadly acceptable to providers. Similarly, even if the allowed amounts were suppressed, the insurers and self-insured employers could have passed on the cost savings from the lower reimbursements to the subscribers in the form of lower premiums. This would offset the effects of the alleged suppression.

186. As mentioned in the previous section, there is no evidence that the percentiles in the Ingenix databases have been suppressed. As such, this is sufficient for demonstrating that there has not been a harm to competition. However, to determine whether the allowed amounts that Aetna authorized represent competitive payment levels broadly acceptable in the provider market, I conducted an additional analysis. I compared the 80th percentile amounts in the Ingenix PHCS database with the amounts listed in the Medicare fee schedule for Dr. Foreman's list of the top 350 CPT codes and 450 geozips and also for *all* CPT codes and geozip combinations. Although Dr. Rausser claims that Medicare does not pay enough, most providers accept Medicare reimbursement and treat a sizeable number of Medicare patients. Moreover, Dr. Cross testified that Aetna has found that most non-participating providers will accept 125 percent of the Medicare fee schedule and will not balance bill the members or seek additional payment from Aetna.[265] Thus, if the Ingenix 80th percentile amounts greatly exceed the Medicare fee schedule amounts, this would provide further evidence that the alleged conspiracy has not harmed competition, meaning that the amounts paid to subscribers to cover their out-of-network care are reasonable and consistent with rates that providers broadly find acceptable as market compensation for their services.

187. To conduct the Medicare fee schedule analysis, I obtained the Medicare amounts from the CMS April release of the Medicare fee schedule for each year, 2006 through 2008. I

[265] Aetna has primarily used a percentage of the Medicare fee schedule to pay "non-par preferred" claims on HMO plans. Aetna has paid 15 to 25 percent above Medicare because these rates "represented fair compensation to providers based on what Aetna has consistently observed in the marketplace." Aetna has also paid at other percentages of the Medicare RBRVS fee schedule when mandated by state statute. Aetna found that most providers were willing to accept 125 percent of the Medicare fee schedule and did not balance bill members or seek additional payment from Aetna. [Declaration of James Cross, M.D. (Head of National Medical Policy and Operations for Aetna), June 30, 2010, ¶¶ 23 and 26-27]

also obtained the 80th percentile amounts from the May release of the Ingenix PHCS medical and surgical modules that matched for each of those same years. Since the Medicare amounts are reported by Fee Schedule Area while the Ingenix 80th percentile amounts are reported by geozips, I had to adjust some of the Medicare amounts for those situations where a geozip overlaps two or more CMS Fee Schedule Areas. To do so, I used a weighted average of CMS rates in the two or more CMS Fee Schedule Areas, where the weight was the relative population of the zip codes that were moved to match the Ingenix geozips. The details are described in the Data Appendix. Finally, like Dr. Foreman, I limited the analysis for his grouping of CPT codes and geozips to include only those CPT-geozip combinations where the number of occurrences in the Ingenix databases are either equal to or greater than 255. This means the analysis is based on actual data only, not derived data. In contrast, the analysis for the grouping of all CPT codes and geozips includes derived data as well.

188. The results of my Medicare fee schedule analysis are summarized in Table 6 below. The average represents the simple average of the Ingenix 80th percentile as a percent of the Medicare fee schedule amount for all CPT-geozip combinations in the study, whereas the weighted average represents the same percent weighted by the number of occurrences within each CPT code-geozip combination. The results show that, regardless of what groupings of CPT codes and geozips are used, the Ingenix 80th percentile is significantly larger, on average, than the Medicare fee schedule amount. For example, the results using Dr. Foreman's CPT-geozip approach show that, during the 2006 through 2008 period, the Ingenix 80th percentile paid more than double what Medicare paid—from 246.5 to 269.6 percent of Medicare (based on a simple average) and from 203.5 to 212.4 percent of Medicare (based on a weighted average). Likewise, for *all* CPT-geozip combinations, the Ingenix 80th percentile paid from 453.0 to 511.1 percent of Medicare (based on a simple average) and from 228.7 to 241.9 percent of Medicare (based on a weighted average). Clearly, these are some of the highest rates actually paid to providers in the market. Whether suppressed or not, the Ingenix 80th percentile pays, on average, at a very generous rate.

Table 6 - Summary of Results for Medicare Physician Fee Schedule Analysis

	Ingenix 80th as a Percent of Medicare Physician Fee Schedule	
	Foreman CPT-Geozips	All CPT-Geozips
	(1)	(2)
2006		
Average	246.5 %	453.0 %
Weighted Average	203.5	228.7
2007		
Average	269.6	478.6
Weighted Average	210.6	239.2
2008		
Average	266.7	511.1
Weighted Average	212.4	241.9

189. Exhibits 23A-23C present the detailed results of my Medicare fee schedule analysis for 2006 based on Dr. Foreman's list of the top 350 CPT codes and 450 geozips.[266] In particular, Exhibit 22A presents descriptive statistics for the analysis. The exhibit shows that, out of Dr. Foreman's list of 350 CPT codes, only 330 matched with Ingenix, only 201 matched with CMS, and only 193 matched between Ingenix and CMS. The reason for these differences is (1) Dr. Foreman created his list using 2007 data, (2) Dr. Foreman included a couple of codes, such as 00300, which are not medical or surgical CPT codes, and (3) the Medicare fee schedule only includes those services and procedures that are used by the Medicare patients. The exhibit also shows that the analysis involved 193 CPT codes and 42,672 CPT code-geozip combinations. Finally, the exhibit shows that the Ingenix 80th percentile amount equaled or exceeded 200 percent of the Medicare fee schedule amount 62.8 percent of the time.

190. Exhibit 23B provides a somewhat different perspective of the results. It consists of a bar chart that shows the number of observations for different ranges of percentages. The range from 100 to 150 percent means that the Ingenix 80th percentile amount can either equal the Medicare fee schedule amount exactly (100 percent) or exceed the Medicare fee schedule amount by up to 50 percent (150 percent). The exhibit shows that, out of the 42,672 matched

[266] The 2007 and 2008 results are summarized in Exhibits 24A-C and 25A-C. They are basically the same as the ones described in the text.

observations, there are only 119 where the Medicare fee schedule amount either exceeds or equals the Ingenix 80th percentile amount. The exhibit also shows that, in the vast majority of the observations (i.e., 62.8 percent), the Ingenix 80th percentile amount exceeds the Medicare fee schedule amount by 100 percent or more. This means the Ingenix 80th percentile amount is at least double what Medicare allows for over 60 percent of provider services in comparable areas.

191. Finally, Exhibit 23C provides a third perspective of the results. It consists of a graph that shows the number of observations for the entire distribution. The green line on the exhibit indicates the average of the distribution. For example, it equals the 246.5 percent figure discussed earlier for 2006. The exhibit also shows that the distribution is skewed to the right. In other words, there are many more observations of the Ingenix 80th percentile greatly exceeding the Medicare fee schedule amount than there are of the Medicare fee amount exceeding the Ingenix 80th percentile (which is relatively rare). Finally, the exhibit shows that there are a sizable number of observations where the Ingenix 80th percentile is more than two times the Medicare fee schedule amount.

192. Exhibits 26A-26C present the detailed results of my Medicare fee schedule analysis for 2006 based on *all* CPT codes and geozips, including those involving the derived data.[267] In particular, Exhibit 26A shows that the analysis is based on 6,557 CPT codes and 2,745,379 CPT-geozips combinations and that the Ingenix 80th percentile amount equaled or exceeded 200 percent of the Medicare fee schedule amount 78.1 percent of the time. Likewise, Exhibit 26B shows that, out of the same 2,745,379 matched observations, there are only 119,853 observations (i.e., 4.4 percent) where the Medicare fee schedule amount either exceeds or equals the Ingenix 80th percentile amount and there are 2,145,024 observations (i.e., 78.1 percent) where the Ingenix 80th percentile amount is at least double the Medicare fee schedule amount. Finally, Exhibit 26C shows that the distribution is skewed to the right and that there are a sizeable number of observations where the Ingenix 80th percentile is more than four and a half times the Medicare fee schedule amount.

[267] The results for 2007 and 2008 are found in Exhibits 27A-C and 28A-C. They are basically the same as the ones described in the text.

193. All of the results in these exhibits indicate that the Ingenix 80th percentile is a very generous amount when compared to the Medicare fee schedule. In my experience and based on Dr. Cross' observation that most providers accept 125 percent of Medicare as payment in full, it is safe to say that the Ingenix-based rates are very generous and pay well above typical commercial market rates. As such, these results further support the conclusion that the alleged conspiracy did not harm competition even if one were to assume that it had taken place and had the effect of suppressing the percentiles, as alleged.

194. Finally, even if suppression could be demonstrated (which it cannot) and even if Aetna used the allegedly suppressed percentiles for the out-of-network rates it offered, this does not prove that plaintiffs' claims of an antitrust or RICO conspiracy are valid. This is for at least two reasons. First, Dr. Rausser provides no coherent theory of a conspiracy and no proof that a conspiracy existed, only an inference that one existed because he assumes there has been suppression. Inadvertent and inappropriate data analysis by Ingenix might lead to the same result without any conspiracy underlying that result. Second, whatever the reason for the possible suppression of the percentiles (assuming they had been suppressed), the employers and other users of these data could easily adjust the percentile they choose (and other terms) to strike the right balance between providing a valuable out-of-network benefit at reasonable costs for subscribers and allowing medical costs for out-of-network services to get out of control.

VIII. THE PROPOSED CLASSES HAVE NOT SUFFERED ANTITRUST INJURY

195. It is my understanding that for plaintiffs to have suffered antitrust injury, they must show that the alleged conspiracy harmed competition ***and*** that they were injured as a consequence. As described above, I find no evidence that the alleged conspiracy has harmed competition in any relevant market at issue in this case. Likewise, I find no evidence that the alleged conspiracy injured the proposed classes as a result of an antitrust or RICO conspiracy. In particular, the plaintiff subscribers were not injured since the allowed amounts that the insurers and self-insured employers authorized were reasonable, generous and consistent with market rates, and the plaintiff providers were also not injured because they are not part of any contract or price setting negotiation with the alleged conspirators. Moreover, they have always had the ability to balance bill the subscribers and leave the reimbursement debate to the subscribers and

their insurers. They enter this matter only as bill collectors from having taken assignment from the subscribers.

IX. AETNA AND THE ALLEGED CO-CONSPIRATORS HAD A REASONABLE BUSINESS JUSTIFICATION FOR SUBMITTING THEIR DATA TO INGENIX, USING THE INGENIX DATABASES, AND THE OTHER PRACTICES

196. As mentioned above, plaintiffs claim that the supposed conspirators adopted their practices to facilitate the alleged conspiracy. However, each alleged conspirator had an independent, unilateral self-interest for adopting each of the practices. The reasonable business justifications for each practice are as follows:

- Submitting Charges Data to Ingenix: All of the contributors received a discount for purchasing the Ingenix PHCS or MDR databases. The discounts equaled as much as 50 percent and, in some instances, even up to 100 percent.[268] Also, the Data Market exhibits characteristics of strong scale economies leading to lower cost production and greater data reliability. As such, the contributors had an incentive to submit their data to Ingenix instead of trying to create a competing product.

- Using the Ingenix Databases: All insurers must find a method for paying providers with whom they have no contracted rate. The traditional indemnity approach is to pay a reasonable amount based on prevailing prices in the area. That is the UCR approach. However, substantial data are needed for reliable charges distributions. The Ingenix product offered the most extensive database. Aetna switched to using the Ingenix PHCS database since it was much larger and more complete than Aetna's own claims data.[269] It switched prior to Ingenix acquiring the PHCS database.[270] In addition, the databases had received the stamp of approval from various states, including New Jersey.[271] There is a strong market incentive to use a widely accepted data source when an insurer describes in an RFP response the methodology that it will use.

- Setting UCR Rates at or around the 80th Percentile: Always paying billed charges does not make sense since there are coding errors and some providers try to game the system with aggressive billing practices. Also, using a commonly accepted rate can

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[268] U.S. Senate, Committee on Commerce, Science, and Transportation, Office of Oversight and Investigations, *Underpayments to Consumers by the Health Insurance Industry*, Staff Report for Chairman Rockefeller, June 24, 2009, p. 6. and INGENIXMDL000003152-3159.

[269] Declaration of James Cross, M.D. (Head of National Medical Policy and Operations for Aetna), June 30, 2010, ¶¶ 12 and 17.

[270] *Ibid.*

[271] New Jersey Administrative Code Title 11, Section 3-29.4.

avoid controversy. As described above, setting rates well above the 50th percentile increases the value of the out-of-network benefit to employees and makes recruiting easier, and keeping them below the 90th percentile avoids some of the highest cost providers. Given the shape of most charges distributions, a UCR threshold around the 75th or 80th percentile provides access to the vast majority of providers without risking excessive medical costs. UCR rates date back to the late 1920s when the Blue plans first began using them.[272] Medicare also adopted UCR rates in the 1960s.[273]

- Using Coordination of Benefits: When there is both a primary and secondary insurer, there needs to be a method for determining how much each insurer is going to pay. The COB process goes back to the 1960s and is a regulatory necessity.

- Eliminating Coding Errors/Outliers: It is appropriate for insurers to eliminate charge amounts that reflect various coding errors.[274]

- Using CPT codes and modifiers to reimburse for provider services: CPT codes and modifiers are used by almost all payers to reimburse for physician services. They are also used by almost all non-facility providers to submit their claims. The AMA first developed and published the CPT codes in 1996. They have evolved over time to control for more factors associated with the services and procedures.

X. OTHER COMMENTS ABOUT PLAINTIFFS' EXPERT REPORTS OR TESTIMONY

197. In his merits report, Dr. Rausser says that those providers that balanced billed and received full billed charges will be omitted from the class.[275] However, the only way that it could be determined that a provider balanced billed and received full billed charges is to conduct individual inquiries of all of the plaintiff providers. This, of course, defeats the purpose of certifying a class. Likewise, the only instance where a subscriber might have been injured is if a provider balanced billed the subscriber and the subscriber paid the additional amount. But the only way that it could be determined that a subscriber was balanced billed and paid the additional amount is to conduct individual inquiries of all of the plaintiff subscribers. Without such an analysis, many of the plaintiff subscribers would likely gain a windfall by being compensated for amounts that they never paid.

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[272] Foreman Merits Report, ¶ 42.

[273] *Ibid.*, ¶ 43.

[274] Expert Report of Bernard R. Siskin, Ph.D., dated August 9, 2010 (hereafter "Siskin Merits Report"), p. 21 and Foreman Merits Report, ¶ 292.

[275] Rausser Merits Report, ¶ 5.

198. Dr. Rausser suggests that the alleged conspirators used a Liaison Committee to help implement and facilitate the alleged conspiracy. Specifically, he wrote: "Under a 10-year Cooperation Agreement entered into as part of the 1998 sale of PHCS, members of HIAA were to continue to advise on and guide the use of PHCS through their participation in a Liaison Committee."[276] However, the available record indicates that the Liaison Committee rarely (if ever) met.[277] Thus, it could not have been a very useful mechanism for facilitating the alleged conspiracy. Similarly, Dr. Rausser suggests that the alleged conspirators used the Ingenix annual Summit meetings to communicate and exchange information relating to the alleged conspiracy.[278] However, a review of the materials that were passed out at the Summit meetings as well the transcripts of some of the MDR/PHCS focus groups that met at those meetings indicate that the Summit meetings were not used for that purpose. Instead, Ingenix used the Summit meetings primarily as a marketing tool to educate the users about the MDR and PHCS databases and to obtain feedback from the users about what additional features and support might be useful to them (such as how to get additional information from Ingenix to help resolve payment disputes).[279] Moreover, the focus group were attended by providers as well as insurers, which means it is implausible that Ingenix used the Summit meetings to facilitate a conspiracy against the providers.[280]

199. Additionally, Dr. Rausser argues that the objectives of Ingenix's DataSpan project were the "natural objectives in the absence of a conspiracy" and implies that cancellation of the project somehow demonstrates the existence of a conspiracy.[281] However, Dr. Rausser concedes that the DataSpan project was not initiated until 2003, years after plaintiffs contend the alleged conspiracy began.[282] The initiation of the project is inconsistent with a conspiracy since, according to the theory, the alleged conspirators would not undertake such a project. Moreover,

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[276] *Ibid.*, ¶ 23.

[277] Ingenix Document, Exhibit 41 (filed under seal). [INGENIX 018 00131-132]

[278] Rausser Merits Report, ¶ 107.

[279] INGENIXMDL000763593-600, INGENIXMDL001086861-869, INGENIXMDL000540912-926, and INGENIXMDL1145714-728.

[280] See, e.g., INGENIXMDL001086861-869.

[281] Rausser Merits Report, ¶ 52.

[282] *Ibid.*

Dr. Rausser does not identify any evidence that anyone other than Ingenix was involved in the decision to cancel the project.

200. In his merits report, Dr. Rausser suggests that the only reason the premiums for PPO plans exceed the premiums for HMO plans is to cover the out-of-network benefits.[283] This is a mischaracterization of the health insurance business. It is well-known that PPO plans historically have had higher premiums than HMO plans because they have had much larger provider networks and, often, lower provider discounts as a result.[284] They offer more choice and fewer restrictions (such as gatekeeping) on members seeking care from specialists. Although PPO plans do provide for out-of-network benefits, many HMO plans do as well by offering point-of-services (POS) options. These POS options would also raise the premium for the HMO product, but usually not as much as the PPO differences.

201. Dr. Rausser asserts that insurers are only at risk of losing members as a result of those with individual coverage switching coverage.[285] While it is true that members with individual coverage are a relatively small portion of commercial coverage, the tail does not wag the dog in this marketplace. Employers are the primary purchasers of commercial health care coverage. They are not "locked into" specific plans or specific plan terms or even a specific out-of-network percentile threshold.[286] As discussed above, employers regularly review their plan terms and adjust any items of concern. While there may be some lag between the point in time at which an employer becomes concerned about an issue and when action is taken, it is unreasonable to argue that employers could be held hostage to the alleged scheme for a multi-year time period, as alleged by the plaintiffs. Aetna is highly monitored and held to account by employers who, along with their benefits consultants, make use of their detailed access to Aetna's claims processing activities. Employers can and will change the terms of their plan or even change their plan administrator or insurer. In 2010, 60 percent of employers offering health

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[283] *Ibid.*, ¶¶ 27 and 56.

[284] J. Gabel, et al., "Health Benefits in 2005: Premium Increases Slow Down, Coverage Continues to Erode," *Health Affairs* Vol. 24, No. 5, (2005), p. 1275; M. Miles, "Plans Offer Different Level of Access to Health Care," *Federal Times*, August 23, 2004.

[285] Rausser Merits Report, ¶ 34.

[286] Declaration of Pamela Kehaly (Aetna's President of National Accounts), July 1, 2010, ¶ 54.

benefits had shopped for a new plan or carrier in the prior year. Of these employers, 27 percent switched to a different carrier and 33 percent changed plan type.[287]

202. In his merits report, Dr. Rausser states that "the mandatory contracts between Ingenix and its insurer 'Customers' include confidentiality agreements that explicitly prohibit insurers from disclosing information about the Ingenix databases to either consumers or physicians."[288] He makes this point in connection with his opinion that defendants conspired to maintain control over charge data and drive out competing products. However, a review of Aetna's license agreement with Ingenix shows that the agreement includes no such confidentiality clause.[289] As explained above, the confidentiality provisions which do exist are intended to keep users from giving away or reselling the data. But these provisions do allow data licensees to provide UCR amounts to providers or subscribers who may call seeking information on a specific CPT code or set of CPT codes. Thus, information is available.

203. Dr. Rausser discusses several CIGNA and Aetna presentations in his merits report which he says "demonstrate that the defendant insurers were well aware of the potential benefits of an anticompetitive scheme."[290] These reports, though, are only talking about ways to control out-of-network costs. They are not talking about conspiracy. Like all companies, CIGNA and Aetna are interested in trying to control their costs. This makes them more competitive by keeping premiums down. Of course, this is consistent with the companies focusing on out-of-network costs based on their own independent, unilateral self-interests. Also, plaintiffs' but-for world involves the payers adding in costs to provide added benefits that the market has demonstrated are not desired, and then to charge higher premiums to cover the increased costs. This is the opposite of what I would expect in a competitive environment.

204. In his merits report, Dr. Rausser asserts that, absent the alleged conspiracy, he would expect to see health plans compete by raising their out-of-network reimbursement levels,

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[287] The Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits - 2010 Annual Survey* (2010), pp. 214-215.

[288] Rausser Merits Report, ¶ 59.

[289] AET-C 0014795-96. See also Declaration of Deborah Justo (Analyst in Aetna's Provider Data Service), July 1, 2010, ¶ 13.

[290] Rausser Merits Report, ¶ 88.

perhaps to levels above the highest Ingenix percentile, which is the 95th percentile.[291] This scenario is simply not realistic given the rapid escalation in most charges distributions beyond the 90th percentile and given the pivotal role employers play in the purchasing of health coverage. As discussed above, employers are well informed about health plans' actual reimbursement levels for out-of-network reimbursement levels and already make adjustments as they see fit to find the right balance in setting their out-of-network reimbursement levels. Dr. Rausser seems to forget here that higher out-of-network benefits cost more in terms of premiums for the fully insured firm and more in terms of medical costs paid out by self-insured firms. The added benefits are not free. Also, the 95th percentile is a choice already available to employers and for the most part they have not found Dr. Rausser's suggestion to be an attractive alternative.

205. Dr. Foreman in his merits report suggests that a lot of the problems are due to the increased market power that the insurers have achieved in the health insurance markets.[292] He further suggests that the increased market power is a widely known concern and has been discussed at all levels of the government. Although there has been a significant amount of consolidation in the health insurance industry, most geographic markets still include a number of different health insurers. In addition, expansion conditions by existing insurers are still relatively easy, which indicates the absence of market power. Finally, if the health insurance industry was really monopolized—as suggested by Dr. Foreman—you would expect the health insurance industry to be among the most profitable industries in the United States. However, a recent study by Fortune indicates that the health insurance industry is only the 35th most profitable industry.[293]

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[291] See, e.g., Deposition of Gordon Rausser, May 20, 2010, p. 104 ("Certainly with regard to any coordination that results in suppression of the pricing or the reimbursement rates, the opportunities that exist for defection are to respond to that by offering more favorable reimbursement rates or more favorable pricing."). See also Rausser Merits Report, ¶ 108 ("…[I]n a competitive environment, an insurer wishing to differentiate itself and promote its product might be expected to offer more favorable reimbursement for out-of-network services. This could be done in any one of a number of ways: by calculating such reimbursements without reference to Ingenix or simply by agreeing to pay a fixed margin *above* the upper value in the Ingenix distribution. I am not aware of any insurer having sought to distinguish itself in this way, despite the obvious competitive advantages of doing so.").

[292] Foreman Merits Report, ¶ 84.

[293] See http://money.com/magazines/fortune/fortune500/2009/performers/industries/profits.

We are also seeing exits from the industry. This, of course, is inconsistent with Dr. Foreman's increased market power concern.

206. The plan language examples that Dr. Siskin relies on as a basis for his "core concepts and factors" for developing an R&C standard are just that – examples.[294] As discussed above, there is a wide variety of out-of-network provisions in Aetna's plans, both for fully-insured and self-insured plans. In addition, Dr. Siskin interprets the sample plan language as a laundry list rather than as it is written as a hierarchy of steps. These out-of-network provisions are written so that the vast majority of claims can be processed automatically. Only those claims with unusual procedures or other difficulties must be handled manually with the potential to use some or all of the many factors that Dr. Siskin lists as his core factors for developing a reasonable and customary standard.

207. In his merits report, Dr. Siskin concludes that, "A review of the Ingenix databases shows that they do not (and cannot) satisfy the core concepts of reasonably similar provider qualifications, medical services rendered and medical market area in which the service is performed."[295] Specifically he calls for a database that includes the following "core concepts":

- The cost of providing the same or a similar service or supply;
- The manner in which charges for the service are made;
- The prevailing charge level made for it in the geographic area where it is furnished;
- Whether the service is unusual; not often provided in the areas; provided by only a small number of providers in the area;
- The complexity;
- The degree of skill needed;
- The type of specialty of the provider;
- The range of services or supplies provided by a facility; and
- The prevailing charges in other areas.[296]

Of course, no automated process that relies on a provider database can satisfy the highly individualized criteria proposed by Dr. Siskin, especially when the out-of-network providers are

[294] Siskin Merits Report, pp. 4-5.

[295] *Ibid.*, p. 11.

[296] *Ibid.*, p. 6.

not credentialed by Aetna as part of its network development and maintenance. Essentially, Dr. Siskin's proposed UCR criteria reduce each UCR determination to a detailed manual process. In fact, the American Medical Association has already struggled with many of these same issues as it developed the CPT codes used today.[297] In the process, they have considered and then set aside, as being either impractical or inappropriate, many of the factors suggested by Dr. Siskin. If all the differences that plaintiffs want to see recognized were actually built into the UCR calculations, it would require billions of unique CPT-geozip combinations, which is wholly impractical.

Thomas R. McCarthy
November 10, 2010

[297] Physician Payment Review Commission, *Annual Report to Congress*, (March 1991).

Data Appendix

A. Contributor Data Analysis

208. Ingenix used the claims charge data that it received from the data contributors to create the Ingenix databases. These data are referred to as "the contributor data." Dr. Foreman conducted two studies of the contributor data to examine whether removing the outliers from the contributor data created a systematic downward bias in the percentiles in the Ingenix PHCS database. He referred to these studies as the 300 CPT Study and the 350 CPT Study. Both studies involved comparing the contributor data (including the outliers) with the Ingenix PHCS data (which allegedly disproportionately excluded the outliers). The studies differed according to the procedure codes and geozips used, though both were based on large and representative samples of CPT-geozip combinations. Based on his studies, Dr. Foreman concluded that the percentile values in the Ingenix databases were suppressed.

209. My contributor data analysis involved (1) reviewing the programs and output files produced by Dr. Foreman for his two studies, (2) replicating the results of his studies, where possible, (3) correcting his work for any errors in methodology, computation, or programming that I found and, then (4) re-estimating the results using his basic framework. I began my work by focusing on Dr. Foreman's 350 CPT Study since he produced relatively more information for that study than for the 300 CPT Study. However, I was unable to replicate all of the results for his 350 CPT Study since he failed to produce all of the programs and output files used to generate the results and since many of the programs and output files that he did produce were incomplete. In addition, although I was successful in replicating the results of his 300 CPT Study, I had to rely primarily on a trial and error approach due to the limited information that he produced.

1. Data Used for the Analysis

210. The contributor data that I analyzed covered the January 2006 through December 2008 period.[298] They consisted of 819.5 gigabytes and included 4,297,199,459 records.[299] Each

[298] INGENIXMDL000756673.

record corresponded to a different line (i.e., CPT code) on a provider claim and contained fifty-seven fields of information, including the date of service, CPT code, modifier codes (if any), charge amount, and zip code for where the service was rendered or the provider's location. One-hundred-and-fifty-six entities contributed data to Ingenix during the 2006 through 2008 period, including health insurers, third-party administrators, and self-insured employers.[300]

211. The Ingenix PHCS database consists of nine standard modules: medical, surgical, allowed, anesthesia, dental, HCPCS, inpatient facility, outpatient facility, and RBRVS. Ingenix releases the medical, surgical, Dental and HCPCS modules twice a year.[301] [See Table A1 below.] The Ingenix PHCS data that I analyzed consisted of all of the medical, surgical, dental, and HCPCS Releases 2005-2 to 2008-1.[302] Each record in the data corresponded to a separate procedure code-geozip combination and included twenty-six fields of information, including the procedure code (e.g., CPT, CDT, or HCPCS code),[303] geozip code, number of occurrences of the service/procedure, and charge amounts for the various percentiles (i.e., 50th, 60th, 70th, 75th, 80th, 85th, 90th and 95th).[304] Ingenix created some geozips by combining service zip codes that had the same first three digits. However, it also created some geozips by combining zip codes that had different first three digits if the aggregate charges were within 5 percent of each other and there were geographical similarities.[305] In addition, Ingenix created the percentiles using both actual and derived data. For purposes of my analysis, I only used the percentiles based on the actual data. Exhibit 29 shows the number of CPT codes and geozips for each of the medical and surgical releases that I utilized based on the actual data.

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[299] By year, the contributor data consisted of 282.8 gigabytes in 2006, 244.1 gigabytes in 2007, and 292.6 gigabytes in 2008.

[300] INGENIXMDL000929773-75 and INGENIXMDL000756673.

[301] AET-C 0014720 - 794.

[302] *Ibid.*

[303] CDT stands for Current Dental Terminology.

[304] The data for radiology CPTs also included percentiles for modified claims such as for the professional-component only.

[305] Deposition of Carla Gee (Vice President of Pricing Solutions for Ingenix), in *McCoy et al. v Health Net, Inc. et al.*, April 6, 2005, pp. 32-35.

Table A1 – Ingenix PHCS Release Dates by Module

Ingenix Module	Release Date	
	First	Second
Medical	May	November
Surgical	May	November
Dental	January	July
HCPCS	June	December

212. Ingenix generated the PHCS modules from the contributor data. It used a data validation process to eliminate duplicate records, records with ineligible dates of service, and records with other coding errors.[306] It also eliminated any records involving a modifier that was likely to affect the amount charged by the provider.[307] Once Ingenix dropped these records, it used a high/low screen to eliminate outliers. Ingenix then split the data into different modules and calculated percentiles. In those situations with nine or less occurrences and where data on a similar procedure in the same area were available, it used derived data to calculate the percentiles. Ingenix defined the pth percentile as the value that has p% of the data below it and (100-p)% above it.[308] If there were 12 charges ranked from low to high, the 80th percentile would equal the 10th charge, i.e., 9.6=12 * 0.8, rounded to the nearest integer.[309] Ingenix assigned the records to a specific release based on the date of service and when the claim was received from the contributor. The PHCS documents indicate that there is usually a two month lag between when Ingenix gets the contributor data and it releases the modules.[310] That is, the Ingenix PHCS Release 2008-1, which came out in May 2008, is based on contributor data that generally covered services provided from the March 2007 through February 2008 period.

[306] Deposition of Carla Gee (Vice President of Pricing Solutions for Ingenix), March 17, 2010, pp. 45, 53-54, 58.

[307] Deposition of Carla Gee (Vice President of Pricing Solutions for Ingenix), *in McCoy et al. v Health Net, Inc. et al.,* April 6, 2005, pp. 42-43.

[308] Joskow Class Cert Report, ¶ 32 and AET-00297181.

[309] AET-00297158-183.

[310] INGENIXMDL000257716, INGENIXMDL000258775, INGENIXMDL000545906, and Cooper AET-ING00081013.

2. The 350 CPT Study

a. Replication of Dr. Foreman's Study

213. According to his merits report, Dr. Foreman used the top 350 CPT codes and top 450 geozips to conduct the study.[311] I attempted to replicate Dr. Foreman's analysis based on the programs he produced through discovery and the follow-up communications that my staff had with him. It is my understanding that prior to selecting the top 350 CPTs and top 450 Geozips, he tried to select only medical and surgical records from the contributor data by either keeping CPT codes in the medical and surgical ranges, dropping records with procedure type of dental, or dropping records where the type of service appeared to be labeled "consultation," "diagnostic laboratory," "anesthesia," or "other medical items or services."[312] He also tried to drop all records that included modifiers. Dr. Foreman further tried to clean the data by dropping records with blank CPT codes or with negative charge values, zero charge values, or charge values less than $1.[313] Finally, he tried to drop all records where the allowed amount exceeded the charge amount.

214. Dr. Foreman created his geozips using the first three digits of the place of service zip code. Once he created the geozips, he then identified the top 350 CPT codes and top 450 geozips. He partitioned his sample of contributor data into five time periods and created percentiles for each CPT code-geozip combination for each time period. He then matched the contributor data for each time period with the Ingenix PHCS release that he felt was most appropriate.

215. The results of his matching are in Table A2 below. The "Data Service Dates" for the Ingenix medical and surgical modules' release indicate the dates of the contributor data used to create each release. As can be seen, his matching method ends up comparing contributor data from one year (say, January – June 2006) with an Ingenix PHCS release based on contributor data from prior years (9/1/04-8/31/05).

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[311] Foreman Merits Report, ¶ 337.

[312] Deposition of Stephen Foreman, November 1, 2010, pp. 234-235.

[313] Foreman Merits Report, ¶ 292.

Table A2 – Dr. Foreman's 350 Match of Contributor Data and Ingenix PHCS Releases

Contributor Data	Ingenix Release – Data Service Dates
January – June 2006	2005, Release 2 – 9/1/04-8/31/05
July – December 2006	2006, Release 1 – 3/1/05-2/28/06
January – December 2007	2006, Release 2 – 9/1/05-8/31/06
January – December 2007	2007, Release 1 – 3/1/06-2/28/07
January – June 2008	2007, Release 2 – 9/1/06-8/31/07
July – December 2008	2008, Release 1 – 3/1/07-2/29/08

216. Finally, in comparing the contributor data to the Ingenix PHCS releases, Dr. Foreman dropped any CPT code-geozip combination where Ingenix reported less than 255 occurrences.

217. Based on the above methodology, Exhibits 30 and 31 present the results of my replication efforts. As the exhibits show, for the 2006 and 2008 comparisons, I was able to replicate Dr. Foreman's numbers almost exactly, but for the 2007 comparisons even when using the same methodology, I was unable to closely replicate Dr. Foreman's numbers. For example, Exhibit 30 shows that, for the last match (i.e., contributor data July–December 2008 and Ingenix PHCS Release 2008–1), Dr. Foreman reported an average difference between the 80th percentile for the contributor data and the Ingenix PHCS data of $90.38, while I found an average difference of $90.39. Likewise, Exhibit 30 shows that, for the first match (i.e., contributor data January–June 2006 and Ingenix PHCS Release 2005–2), Dr. Foreman reported an average difference between the 80th percentile for the contributor data and the Ingenix PHCS data of $64.06, while I found the same exact average difference. Finally, Exhibit 30 shows that, for the first match of 2007 (i.e., contributor data January-December 2007 and Ingenix PHCS Release 2006-2), Dr. Foreman reported an average difference between the 80th percentile for the contributor data and the Ingenix PHCS data of $52.01, while I found an average difference of $73.25. The results show that I have been able to replicate virtually all of the steps taken by Dr. Foreman for his 2006 and 2008 comparisons despite the incomplete programs produced by Dr. Foreman, which prevented me from seeing every programming line he used to select his CPT codes and geozips, create his contributor and Ingenix PHCS datasets, make his comparisons, and generate his results. For Dr. Foreman's 2007 comparisons, I am uncertain why I was unable to

closely replicate his results using this same approach, but it may be due to his having used a different methodology than he employed for his 2006 and 2008 comparisons. Again, there is no way to know for certain since the programs produced by Dr. Foreman are incomplete.

b. NERA's Revision of Dr. Foreman's Study

218. In replicating Dr. Foreman's work for the 350 CPT Study, I found several errors that he made in cleaning the data. First, he should not have kept records from the contributor data if they were duplicates. Instead, he kept duplicate records, which should have been dropped. Second, he should have only kept records from the contributor data when comparing the medical and surgical modules that had a procedure type of "C." It is my understanding that this is the flag that Ingenix used to identify the medical and surgical procedures for the PHCS modules.[314] Instead, he also kept records with a procedure type of "A," "D," "F," "N," "O," and "S."[315] As a result, even though he mostly kept only CPT codes in the surgical and medical ranges (i.e., 10000-60000 for surgical and 70000-90000 for medical), he also kept records that Ingenix designated for the anesthesia and outpatient facility modules, along with records that were missing information necessary to allocate them to a module.[316] Third, he should not have dropped records from the contributor data based on the type of service. In doing so, Dr. Foreman incorrectly dropped a number of records that he should have kept, such as those involving consultations. Fourth, for his comparison between the 2007 contributor data to the Ingenix PHCS Releases 2006-2 and 2007-1, Dr. Foreman dropped all surgical CPTs and analyzed 299 CPTs rather than 350.[317] Fifth, on the list of top 350 CPTs used by Dr. Foreman, there were three codes that were not in the medical and surgical ranges, and, therefore, were not included in

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[314] See, e.g., Cooper AET-ING00021445-477.

[315] These procedure types indicate Anesthesia, Dental, Freestanding Facility, Not Allocated, Outpatient Facility, and Ambulatory Surgery Center. [E-mail from Sara H. Wilson, Esq., Gibson Dunn & Crutcher, to Elizabeth Newlon, NERA on 9/23/2010, Subject: Aetna litigation – Ingenix contribution info; Cooper AET-ING00021445-477]

[316] I identified the other procedure types by analyzing the procedure types in the data created for my replication of Dr. Foreman's results. Dr. Foreman attempts to drop procedure type "D" in his 2008 contributor data, but only does so for January and February, 2008. ["Extraction Med Surg 2008.docx"] See, E-mail from Jason Bonk, Esq., Weil, Gotshal & Manges LLP, to Thomas McCarthy, NERA, on 10/7/2010, Subject:.

[317] Dr. Foreman did not produce the output file that shows his comparison between the 2007 contributor data and the first Ingenix PHCS release of 2007. It may be the case that he dropped the surgical CPTs in this analysis, too.

the Ingenix modules. These codes appear to be revenue codes and not CPT codes.[318] Dr. Foreman acknowledged at his merits deposition that revenue codes should be removed from the analysis.[319] Finally, for all of his 2006 and 2007 contributor data comparisons, Dr. Foreman analyzed 462 geozips rather than 450 geozips.[320]

219. Similarly, in replicating Dr. Foreman's work, I found that he had incorrectly created the geozips for the contributor data. To create the geozips in the contributor data, he used the first three digits from the service location zip code. However, his program contained an error that resulted in zip codes that end in "00" being put into a lower geozip.[321] For example, the zip code 08300 should be in geozip 083 but his program put it into geozip 082. But more importantly, combining zip codes by their first three digits does not always correspond to how Ingenix groups zip codes into geozips. Dr. Foreman should have taken the first three digits and then used the Ingenix geozip mapping to create the geozip groupings. As mentioned in the text, these errors caused him to match the geozips correctly only about 50 percent of the time.

220. Finally, in replicating Dr. Foreman's work, I found that he had made several errors in executing his analysis. First, I found he used claim lines rather than units to calculate the percentiles for the contributor data. The units indicate how many times the service or procedure was performed.[322] This can easily distort the results since it understates the number of times that the CPT code charge amount should be counted. Dr. Foreman admitted in his merits deposition that the impact of units should be explored further, but he did not have time to do so before submitting his report.[323] Second, for radiology CPT codes, I found that for all of his

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[318] These codes consist of 00300 and 00301 (for 2006 and 2007) and 00002 (for 2008). [See, "Contrib Master 2006 01_06.docx," "Contrib Master 2006 07_12.docx," "Contributor 2007 Master.sas," and "Extraction Med Surg 2008.docx."] It is my understanding that revenue codes are 3-digit numbers that are used on hospital bills to tell the payers either where the patient was when he/she received treatment or what type of item a patient might have received during his/her treatment. Revenue codes are complementary to CPT codes. They allow the hospitals to use the same CPT code in multiple departments since the revenue code indicates in which department the service was provided. A hospital claim will not be paid unless it includes both types of codes.

[319] Deposition of Stephen Foreman, November 2, 2010, pp. 122-124.

[320] See, "Contrib Master 2006 01_06.docx" and "Contributor 2007 Master.sas."

[321] See "Extraction Med Surg 2006.docx," "Extraction Med Surg 2007.docx," and "Extraction Med Surg 2008.docx."

[322] The charges associated with each claim line represent the charges per unit.

[323] Deposition of Stephen Foreman, November 1, 2010, pp. 158-159.

comparisons he compared contributor percentiles based on both the professional and technical amounts to Ingenix percentiles based on the professional amount only.[324] This, of course, would make the contributor percentiles much larger than they really should be. Third, I found that he compared contributor data from one time period (say January – June 2006) with an Ingenix PHCS release based on contributor data from earlier time periods (9/1/04-8/31/05) and kept only those records submitted in time for Ingenix to process them for the release. This means his analysis is meaningless for evaluating whether removing the outliers from the contributor data caused a systematic downward bias in the percentiles in the Ingenix PHCS database. The only way that such an analysis could work is if it compared the actual contributor data claim lines analyzed for one time period (say, March 2007 through February 2008) with the Ingenix PHCS release based on those contributor data claim lines for the same time period (say, March 2007 through February 2008). Fourth, when removing CPT-geozip combinations with less than 255 observations, Dr. Foreman only dropped combinations when Ingenix occurrences were less than 255. He should have also dropped when the number of occurrences in his contributor data was less than 255. Therefore, he only applied his restriction to the Ingenix percentiles and not to his own contributor data percentiles. Moreover, given that he analyzes six months of data for 2006 and 2008, it is likely that there were contributor percentiles analyzed with less than 255 occurrences. Fifth, although Dr. Foreman planned to drop all modifiers from the contributor data, he did not drop modifiers in January and February 2008. Finally, when reading in the monthly contributor data files for his analysis Dr. Foreman uses the August 2006 data file instead of reading in the September 2006 data file. Similarly, he uses the March 2008 data file instead of reading in the April 2008 data file. Additionally, one of the 2007 data files is excluded from his analysis because he did not use the correct file name when reading it in.

221. My analysis of the 350 CPT Study described in the text is based on following Dr. Foreman's approach but only after correcting the errors listed above.[325] Also, since the only

[324] This can be confirmed by examining Dr. Foreman's output files, which show the Ingenix PHCS data that he is comparing to the contributor percentiles. In particular, they show that the values given for the Ingenix PHCS percentiles are those for the professional component only. The records are also for the system_type equal to 44, which correspond to the radiology professional claims only.

[325] In addition to dropping blank procedure codes, as Dr. Foreman does, I also remove invalid procedure codes. These are procedure codes with less than 5 characters or that contain unexpected characters such as a dash or a quote.

contributor data that I have covers the January 2006 through December 2008 period, I limited my comparison to the Ingenix PHCS Releases 2007-1, 2007-2, and 2008-1. Further, I identified the top 350 CPT codes and top 450 geozips by ranking on the number of occurrences in the contributor data. In particular, I selected the 350 CPTs first, then after keeping only the top 350 CPTs, I selected the top 450 geozips. I used a slightly different set of the top 350 CPT codes and 450 geozips for each of my comparisons because the ranking was based on the specific time period being analyzed. Finally, my geozips also differed from Dr. Foreman's since I had to correct his geozip definitions for the problems mentioned above. Importantly, I could not rely on Dr. Foreman's geozips because, in almost 50 percent of the cases, his geozips did not match a geozip in the Ingenix data.

3. The 300 CPT Study

a. Replication of Dr. Foreman's Study

222. The production for the 300 CPT Study is much more incomplete than the production for the 350 CPT Study. For example, Dr. Foreman did not produce any of the code written for the 300 CPT Study. As such, I had to use a trial and error approach to replicate his results. However, based on my replication efforts and on my review of the information that he did produce, I have been able to confirm the following.

223. First, the 300 CPT Study is mislabeled. It includes CPT codes, CDT codes, and HCPCS codes. Moreover, it does not include the top 300 procedure codes for any of these categories of codes. In particular, the 300 CPT Study includes less than 250 CPT codes and less than 50 CDT codes per comparison period.[326]

224. Second, even though Dr. Foreman's merits report says that the 300 CPT Study is based on "300 geogzip areas selected at random," my replication efforts and my review of the information that he did produce indicate that the study was based on the top 300 geozips and not 300 geozips selected at random. For example, the Excel files that contain the results for the 300

[326] See Qual 90 _06_05v2.xlsx, Comp 300 Ing _06_01.xlsx, Comp 300 Ing_07_02 Rev.xlsx, Comp 300 Ing 08 rev.xlsx, and Comp 300 Ing _08_08 Rev.xlsx.

CPT Study all say "top 300 GeoAreas."[327] Likewise, his output files show that there is a strong overlap (i.e., greater than 90 percent) between the top 300 geozips and Dr. Foreman's 300 geozips that were supposedly randomly selected. Such a high overlap is unlikely if the 300 geozips had been selected randomly. Finally, Dr. Foreman acknowledged at his merits deposition that the 300 geozips were not selected at random.[328]

225. Third, Dr. Foreman's approach to the comparison periods used for the 300 CPT Study is similar to the 350 CPT Study. Specifically, he compares the contributor data for one time period with Ingenix PHCS releases based on contributor data for earlier time periods. The results of his matching for the medical and surgical modules are listed in Table A3. In contrast to the 350 CPT Study, Dr. Foreman compared a full year of contributor data to all of the Ingenix PHCS releases for the 300 CPT Study.

Table A3 – Dr. Foreman's 300 CPT Study Match of Contributor Data and Ingenix PHCS

Medical and Surgical Modules	
Contributon Data	**Ingenix Release - Data Service Dates**
January – December 2006	2005, Release 2 – 9/1/04-8/31/05
January – December 2006	2006, Release 1 – 3/1/05-2/28/06
January – December 2007	2006, Release 2 – 9/1/05-8/31/06
January – December 2007	2007, Release 1 – 3/1/06-2/28/07
January – December 2008	2007, Release 2 – 9/1/06-8/31/07
January – December 2008	2008, Release 1 – 3/1/07-2/29/08

226. Fourth, the 300 CPT Study used a different methodology than the 350 CPT Study to derive the geozips and to choose the claim records to be included in the analysis. Specifically, the 300 CPT Study (1) used the Ingenix geozip mapping to create the geozips but (2) did not use "type of service" to eliminate claim records. The 300 CPT Study also included claim records with charges of less than a dollar[329] and with charges equal to zero if the allowed amount was

[327] The full titles of the Excel files are "Ingenix 2006 contributor versus published for top 300 Codes and top 300 GeoAreas.xls," "Ingenix 2007 contributor versus published for top 300 Codes and top 300 GeoAreas.xls," and "Ingenix 2008 contributor versus published for top 300 Codes and top 300 GeoAreas.xls."

[328] Deposition of Stephen Foreman, November 1, 2010, pp. 113-114.

[329] Dr. Foreman admitted this at his merits deposition after reviewing one of Mr. Cohen's SQL programs. [Deposition of Stephen Foreman, November 1, 2010, p. 156]

missing. These differences are not surprising since Dr. Foreman acknowledged at his merits deposition that he did the programming for the 350 CPT Study, whereas Mr. Cohen did the programming for the 300 CPT Study.[330] He also admitted that he did not check Mr. Cohen's programming and underlying work.[331]

227. Fifth, like the 350 CPT Study, the 300 CPT Study did not use the proc type "C" to select the claim records used for its analysis of the Ingenix PHCS medical and surgical modules. It also did not use the proc type "D" to select the dental claims lines and "H" to select the HCPCS claims lines. In addition, it did not eliminate duplicates. Finally, like the 350 Study, it eliminated all claim records involving a modifier.

228. Exhibits 32-34 present the results of my replication efforts for the 300 CPT Study. The exhibits show that, even though Dr. Foreman did not produce any of the code written for the 300 CPT Study, I have been able to replicate his results very closely. For example, Exhibit 32 shows that, for the first match of 2007 (contributor data 2007 and Ingenix PHCS Release 2006-2), Dr. Foreman found the average difference and weighted average difference for the medical and surgical comparison to equal $42.94 and 14.8 percent, respectively, whereas I found them to equal $42.99 and 14.8 percent. Likewise, Exhibit 33 shows that, for the second match of 2007 (contributor data 2007 and Ingenix PHCS Release 2007-1), Dr. Foreman found the average difference and weighted average difference for the dental comparison to equal $20.53 and 11.8 percent, respectively, whereas I found them to equal $20.54 and 11.8 percent. Finally, Exhibit 34 shows that, for the two matches of 2008 (contributor data 2008 and Ingenix PHCS Releases 2007-2 and 2008-1), Dr. Foreman and I both found the exact same percentage of combinations where the contributor percentile values were greater, equal, or less than the Ingenix percentile values.

b. NERA's Revision of Dr. Foreman's Study

229. Based on what I have confirmed, the 300 CPT Study suffers from many of the same problems as the 350 CPT Study as well as some additional problems referenced above. The problems that are common to both studies include: (1) incorrectly comparing contributor

[330] *Ibid.*, pp. 48, 50, 89, and 142.

[331] *Ibid.*, p. 50.

data from one time period with the Ingenix PHCS data from earlier time periods, (2) incorrectly including facility claims when comparing the results to the physician claims analyzed in the Ingenix PHCS percentiles for the medical and surgical modules, (3) incorrectly building the contributor distributions based on claim lines without counting the units associated with each claim line, and (4) incorrectly including duplicate records in the analysis. Likewise, the problems that are unique to the 300 CPT Study include: (1) not realizing that the Ingenix PHCS dental module corresponds to a different time period than the Ingenix PHCS medical and surgical modules and (2) incorrectly reusing the same contributor percentiles to compare with different Ingenix PHCS releases. Finally, even though the 300 CPT Study used the Ingenix mapping to create its geozips, it still defined some of the geozips incorrectly.

230. My analysis of the 300 CPT Study described in the text is based on following the basic approach outlined in Dr. Foreman's merits report, but only after correcting the errors listed above. However, I also made two changes to that approach. First, since the 300 CPT Study was based on the top 300 geozips and not 300 geozips selected at random, I also used the top 300 geozips for my analysis. Second, even though Dr. Foreman labeled this study the 300 CPT Study, it included dental codes and HCPCS codes as well as CPT codes. Thus, it did not include 300 codes for either the physician services or the dental services. Since Dr. Foreman used the results of the 300 CPT Study to estimate the overall average alleged suppression percentages that he used for calculating damages and since the number of CPT codes and CDT codes that Mr. Cohen used to generate those results were significantly less than 300 (especially for dental), I re-estimated the analysis using the top 300 CPT codes and the top 300 dental codes for each comparison period. This ensured that I would have a more representative sample.

B. Medicare Fee Schedule Analysis

231. Medicare uses the Medicare fee schedules to reimburse physicians and various other providers for treating its patients. My Medicare fee schedule analysis involved determining what percentage of the Medicare fee schedule the Ingenix PHCS 80th percentiles represented.

1. Data Used for the Analysis

232. To conduct the analysis, I utilized a number of different databases. The first set of databases consisted of the CMS Physician Fee Schedules (PFS) for January and July of 2006 through 2008.[332] The main PFS database that I used for each year was the April database. I used the January database to fill in gaps if the April database did not include fee amounts for the various CPT code and locality combinations. I choose the April database since the goal was to get whatever Medicare fee schedule information most closely matched the timing of the first release of the Ingenix PHCS database in each year. The first release of the Ingenix PHCS medical and surgical modules comes out in May of each year. Each record in the PFS database contained eight fields, including the year, carrier_id, locality, CPT code, modifier, and non_facility_fee.

233. To be able to match the PFS data to the Ingenix PHCS data by CPT code and geozip, I had to identify which zip codes were in each of the Medicare fee schedule areas. Since the Medicare fee schedule information in the PFS databases is organized according to carrier and locality, I had to determine (1) which Medicare Fee Schedule Area is associated with each carrier and locality, (2) which counties are associated with each Medicare Fee Schedule Area, and (3) which zip codes are associated with those counties. To do this I used a second set of databases that consisted of carrier crosswalk files, a Medicare Fee Schedule Area definition file, and a zip code file. The carrier crosswalk and Medicare Fee Schedule Area definition files are backup files to the PFS databases, while the zip code file comes from a different source.[333] The carrier crosswalk files indicate the Medicare Fee Schedule Area associated with each carrier and locality. Likewise, the Medicare Fee Schedule Area definition files indicate the counties associated with each Medicare Fee Schedule Area. Finally, the zip code files indicate all of the zip codes associated with each county.

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[332] For 2007, I also used a January revision to the January file. I obtained these files from the following website: http://www.cms.gov/PhysicianFeeSched/PFSNPAF/list.asp#TopOfPage. The specific files I downloaded consist of PFALL06A.TXT, PFREV06b.txt, PFALL07A.TXT, PFRV2_07ARev.txt, PFRV2_07B.txt, PFALL08A.TXT, and PFRV2_08B.txt.

[333] I downloaded the carrier crosswalk and zip code files from the same website mentioned in the previous footnote. The carrier crosswalk files are PF06PC.doc, PF07PC.doc, and PF08PC.doc, while the Fee Schedule Area definition file is 10LOCCO.xls. Also, I download the zip code file from http://www.zipcodedownload.com/.

234. A third set of databases that I utilized consisted of the first release of the Ingenix PHCS medical and surgical modules for 2006 through 2008.[334] I described these databases in detail in the previous section of this Appendix.

235. The fourth set of databases that I utilized consisted of the Ingenix geozip files.[335] These files indicate which zip codes are included in each Ingenix geozip. I used them to convert the Medicare Fee Schedule Areas into Ingenix geozips. As mentioned above, there is not a one to one matching between all of the three-digit zip codes and the geozips. In particular, some Ingenix geozips include more than one three-digit zip code.

236. Finally, the last set of databases that I utilized consisted of the U.S. Census Bureau's population by zip code tabulation areas[336] and the U.S. Census Bureau's population and housing profile.[337] These files indicate the population for each zip code in the U.S. and Puerto Rico based on the 2000 census. I used these population files to weight the Medicare fee amounts applicable to particular zip codes for some of the Ingenix geozip matches I created.

2. Methodology for Analysis

237. I conducted my analysis using two different groupings of CPT codes and geozips. The first grouping consisted of the exact same CPT codes and geozips that Dr. Foreman used for his top 350 CPT codes and 450 geozips study,[338] while the second grouping consisted of *all* of the CPT codes and geozips in the Ingenix PHCS databases. To be consistent with Dr. Foreman's methodology, I limited the first grouping to include only those CPT-geozip combinations where the number of occurrences in the Ingenix databases are either equal to or greater than 255. Likewise, in the case of the PFS database, I limited my analysis for both groupings to those

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[334] AET-C 0014720-794.

[335] *Ibid.*

[336] U.S. Census Bureau, Population by ZIP Code Tabulation Areas, "ZCTA File," 2000, http://www.census.gov/geo/www/gazetteer/places2k.html.

[337] Population for Virgin Islands is obtained from U.S. Census Bureau, "Population and Housing Profile: 2000."

[338] I identified these CPT codes and geozips from the backup materials that Dr. Foreman produced during discovery. The materials show that Dr. Foreman used the exact same set of CPT codes and geozips for 2006 and 2007 but a different set for 2008. As mentioned, the materials also show that Dr. Foreman did not use the 450 geozips that he mentioned in his merits report. Instead, he used 462 geozips for 2006 and 2007 and all geozips for 2008.

records that involved non-facility settings and did not include a modifier. Finally, in the case of the Ingenix PHCS databases, I limited my analysis for both groupings to the medical and surgical modules only and to those records where the value of the 80th percentile is greater than zero.[339]

238. The basic methodology that I used to conduct my analysis for both groupings involved the following steps. First, I compared the January PFS database with the April PFS database to fill in any missing values in the April PFS database. Second, I compared the Ingenix geozips to the Medicare Fee Schedule Areas to determine which geozips matched which Fee Schedule Areas. This, of course, involved converting the Fee Schedule Areas to geozips. Third, for those instances where an Ingenix geozip overlapped with two or more Medicare Fee Schedule Areas, I used the population estimates to calculate a Medicare fee amount for the geozip. This involved determining how many zip codes in the geozip were located in each Fee Schedule Area and then using the population for those zip codes as a weight to calculate an adjusted Medicare fee amount for the geozip. The adjusted Medicare fee amount equaled the actual Medicare fee amount for each Fee Schedule Area weighted by the population in the corresponding zip codes. Finally, once I had determined the Medicare fee amounts for all of the geozips, I then compared them to the 80th percentile amounts in the Ingenix PHCS databases. This allowed me to determine what percentage of the Medicare fee amount the 80th percentile amount represented.

[339] It is my understanding that Ingenix would set the value equal to zero if it did not have a sufficient number occurrences to generate an actual or derived value for the percentile.

Exhibit 19

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

IN RE: Aetna UCR LITIGATION,	**MDL NO. 2020**
This Document Relates To: ALL CASES	**MASTER FILE NO. 2:07-CV-3541 (FSH) (PS)**

SUPPLEMENTAL EXPERT REPORT OF THOMAS R. McCARTHY

October 26, 2011

CONFIDENTIAL – ATTORNEYS' EYES ONLY

CONTENTS

I. INTRODUCTION

1. I am the same Thomas R. McCarthy who submitted an earlier expert report on behalf of counsel for defendant Aetna. That report dealt with the merits phase of the case and I submitted it on November 10, 2010. My qualifications and understanding of the claims in this litigation are described in that report. Also, the expert opinions reflected in that report remain unchanged. I have learned nothing that would cause me to change them. My billing rate continues to be $675 per hour.

2. Since I submitted my earlier expert report, plaintiffs' experts Dr. Rausser and Dr. Foreman have both submitted new declarations as attachments to plaintiffs' class certification reply brief.[1] Dr. Rausser's new declaration includes a response to the defendants' arguments against class certification as well as a rebuttal to my earlier report.[2] Dr. Foreman's new declaration includes two new CPT studies (his 500 CPT study and his 5000 CPT study), some assertions about his CPT studies, and a critique of the conspiracy opinions in my earlier report.[3]

3. I have been asked by counsel for Aetna to examine Dr. Foreman's two new CPT studies to see if Dr. Foreman has provided more reliable findings based on correcting his earlier CPT studies or whether they suffer from the same flaws as his earlier studies, which I critiqued in my initial report. I have also been asked by counsel for Aetna to address Dr. Foreman's new assertions that the contributor data he has used for his CPT studies do not include (1) any outpatient or facility claim records or (2) any duplicate claim records.[4] Both of these criticisms were raised by me in connection with his earlier CPT studies. Finally, I have been asked by counsel for Aetna to comment on Dr. Foreman's critique of my conspiracy opinions and to respond to Dr. Rausser's criticisms of my earlier report.

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1 Reply Memorandum of Law in Further Support of Plaintiffs' Motion for Class Certification, November 24, 2010.

2 Declaration of Gordon Rausser, Ph.D. dated November 24, 2010 (hereafter "Rausser 11-24-10 Decl.").

3 Declaration of Stephen Foreman, PhD, JD, MBA dated November 24, 2010 (hereafter "Foreman 11-24-10 Decl.").

4 Foreman 11-14-10 Decl., ¶¶ 239 and 242.

4. In performing my work for this supplemental report, I have reviewed plaintiffs' class certification reply brief, the new declarations submitted by Dr. Rausser and Dr. Foreman, and the rough drafts of Dr. Rausser's and Dr. Foreman's depositions regarding their new declarations. I have also had my staff review the programs and output files that Dr. Foreman produced in support of his two new CPT studies. In addition, I have had my staff use the 2006-2008 contributor data and the 2005-2008 Ingenix PHCS releases to replicate and revise Dr. Foreman's two new CPT studies. Finally, I have conducted an additional interview with Ms. Carla Gee, who is Vice President of Pricing Solutions for Ingenix. All of the additional materials that I have considered are cited in this report.

II. SUMMARY OF OPINIONS

5. My opinions in this matter are based on my training and experience as a health and industrial organization economist and on my review and analysis of the available record. In the remainder of this report, I will explain in detail the basis for each of the opinions summarized below:

6. *Dr. Foreman's 500 and 5000 CPT studies suffer from most of the same flaws as his earlier CPT studies*. To understand the methodologies that Dr. Foreman used for his 500 CPT study and 5000 CPT study, I began by replicating both studies. In doing so, I found that the 500 CPT study and 5000 CPT study suffer from many of the same flaws as his earlier CPT studies. These include (1) incorrectly comparing contributor data from one time period with the Ingenix PHCS results created using contributor data from earlier time periods; (2) incorrectly using the wrong geozips to compare Dr. Foreman's percentiles with the Ingenix percentiles; (3) incorrectly handling claim lines with multiple units when creating his percentiles; (4) incorrectly including outpatient and facility claim lines when creating his percentiles; and (5) incorrectly including duplicate claim lines in his analysis. All of these criticisms were raised in my previous review of his earlier studies.

7. I also found that correcting these errors, as well as some others, reversed Dr. Foreman's findings—just as happened when I corrected his earlier CPT studies. For example, Dr. Foreman reported that, for his 500 CPT study, the weighted average percent differences for the 80th percentile (based on CPT-geozip combinations with at least 9 claim lines)

equaled 24.0 percent, 26.9 percent, and 28.3 percent, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. In contrast, after correcting his errors, I found that the weighted average percent differences equaled only 0.70 percent, 0.86 percent, and 0.91 percent (based on Ingenix weights) and only -0.07 percent, 0.75 percent, and 0.72 percent (based on contributor weights). Likewise, Dr. Foreman reported that, for his 5000 CPT study, the weighted average percent differences for the 80th percentile equaled 14.3 percent, 18.5 percent, and 21.4 percent, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. In contrast, after correcting his errors, I found that the weighted average percent differences equaled only 0.82 percent, 0.96 percent, and 1.00 percent (based on Ingenix weights) and only 0.08 percent, 0.83 percent, and 0.79 percent (based on contributor weights).

8. Similarly, for his greater, equal to, or less than analysis, Dr. Foreman reported that, for his 5000 CPT study, the contributor values exceeded the Ingenix values in 53.1 percent, 45.9 percent, and 54.2 percent of the CPT-geozip combinations, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. In contrast, after correcting his errors, I found that only 19.6 percent, 19.8 percent, and 18.7 percent of the total combinations had contributor values that exceeded the Ingenix values. Correspondingly, I found that the Ingenix values equaled or exceeded the contributor values 80.4 percent, 80.2 percent, and 85.3 percent of the time, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. Moreover, even though Dr. Foreman did not perform this analysis for the 500 CPT study, after correcting his errors, I found that the contributor values exceeded the Ingenix values only 17.4 percent, 17.5 percent, and 16.3 percent of the time, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. Correspondingly, I found that the Ingenix values equaled or exceeded the contributor values 82.6 percent, 82.5 percent, and 83.7 percent of the time, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. Of course, all of the above results are inconsistent with Dr. Foreman's conclusion that the percentiles in the Ingenix PHCS releases have been systematically suppressed.

9. *The contributor data that Dr. Foreman uses for his 500 and 5000 CPT studies include facility claims and duplicate claims*. In his new declaration, Dr. Foreman asserts that the contributor data he has used for his 500 and 5000 CPT studies do not include (1) any facility claims or (2) any duplicate claims—claims that he agrees should be excluded (if they are in the

contributor data) in determining the percentiles for his CPT studies.[5] To investigate Dr. Foreman's assertions that none of these claims are in the contributor data, I examined the 2008 data that Dr. Foreman used for his 500 CPT study. I found that the 2008 data include a considerable number of the claims lines that are indicative of facility claims and not physician claims (e.g., the claim was submitted on the UB form used by facilities). Additionally, many of these claim lines have charge amounts 2 to 3 times larger than the claim lines identified by Ingenix as being claims for physician services. A study I performed comparing the distribution of charge amounts for the different types of claims further indicated that these claim lines represent facility claims and not physician claims. Looking at individual CPT-geozip combinations, I found that a vast majority of physician charges are drawn from statistically different populations than the charges from claims lines that are indicative of facility claims. Moreover, the median and 80th percentile charge amounts from the facility claims are, on average, much larger than the charges from the physician claims. These results demonstrate that Dr. Foreman has continued to include charges unrelated to physician services in his analysis, which significantly and erroneously biases his estimated contributor data percentiles upward.

10. Likewise, I found that the dataset Dr. Foreman relied on for his results was not properly purged of duplicate claims, which he and other experts for plaintiffs have agreed should be excluded from the charge distributions.

11. *Dr. Foreman's critique of my conspiracy opinions is misguided and includes a number of mischaracterizations and inaccuracies*. I review many of Dr. Foreman's comments and criticisms in Section V below.

12. *Dr. Rausser's critique of my initial report does not meaningfully rebut any of the points in that report*. I review many of Dr. Rausser's comments in Section VI below.

III. DR. FORMAN'S 500 AND 5000 CPT STUDIES

A. Description

13. As mentioned in my earlier report, Ingenix created the percentiles in its PHCS releases by taking the charge data received from various contributors for certain periods,

[5] Foreman 10-11-11 Dep., pp. 26 and 125.

cleaning those data to remove what it considered to be ineligible claim records, and then using the remaining data to create the percentiles. Dr. Foreman's two new CPT studies claim to be focused on the Ingenix PHCS releases for the medical and surgical modules only. To examine whether the percentiles in the Ingenix PHCS releases are systematically suppressed, Dr. Foreman uses the contributor data to create percentiles and then he compares these percentiles to the Ingenix percentiles. In particular, he tries to estimate how big the average difference in his percentiles and the contributor percentiles might be, and what percent of the time his percentiles are higher than, equal to, or less than the percentiles published by Ingenix. Dr. Foreman's general approach, however, is a self-developed methodology which is unreliable and flawed by an erroneous execution. Dr. Foreman's work is non-transparent and not always replicable. Both transparency and the ability to replicate results are necessary for a scientific methodology to be considered sound and reliable.

14. According to Dr. Foreman's new declaration, the 500 CPT study and 5000 CPT study differ primarily according to (1) the number of CPT codes evaluated, (2) the time periods compared, and (3) the method used to control for claim records with multiple units.[6] In particular, Dr. Foreman says that the 500 CPT study uses the 500 most common CPT codes representing 94 percent of all medical and surgical claims in the contributor data and all 421 geozips.[7] He also says that the 500 CPT study compares the percentiles from the contributor data with a supposedly "contemporaneous" release of the Ingenix PHCS product as well as the two PHCS products from the prior year, but that it does not control for multiple units (given the supposedly negligible impact of them).[8] Similarly, Dr. Foreman says that the 5000 CPT study uses all 5000 CPT codes contained in the Ingenix PHCS medical-surgical product for all 421 geozips.[9] He also says that the 5000 CPT study provides both past and current comparisons

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[6] Unlike his earlier studies, the 500 CPT study and 5000 CPT study both keep CPT-geozip combinations with fewer than 255 claims records. [Foreman 11-24-10 Decl., ¶¶ 160 and 162] In fact, for the 5000 CPT study, Dr. Foreman only reports results for the situation where the CPT-geozip combinations have at least 9 claim records. [Foreman 11-24-10 Decl., pp. 32-33] Also, unless otherwise noted, I use the terms "claim records" and "claim lines" interchangeably throughout this report.

[7] Foreman 11-24-10 Decl., ¶ 157.

[8] Foreman 11-24-10 Decl., ¶¶ 159-160.

[9] Foreman 11-24-10 Decl., ¶ 162. Dr. Foreman's characterization that he is using "all" CPT codes in his 5000 CPT study is really an overstatement since there are many more than 5000 CPT codes each year with at least 9 claim records.

(including a comparison that is more current than the 500 CPT study) and that it controls for the units issue by "divid[ing] claim lines with multiple units."[10] Finally, Dr. Foreman says that the results of the 500 CPT study and 5000 CPT study are qualitatively the same as the results of his earlier studies. He claims both studies show that there is systematic downward bias in the percentiles of the Ingenix PHCS releases.[11]

B. Replication

15. As with his earlier studies, to understand the methodologies that Dr. Foreman used for his 500 CPT study and 5000 CPT study, I began by replicating both studies. Exhibits 1 and 2 present the results of my replication results of the 500 CPT study. The exhibits are both based on a weighted average percent difference analysis.[12] The exhibits differ, however, according to the number of claim lines required for a CPT-geozip combination to be considered (i.e., at least 9 claim lines or at least 255 claim lines). As the exhibits show, I was able to replicate Dr. Foreman's 500 study very closely. For example, Exhibit 1 shows that, out of the 72 possible percentile comparisons based on at least 9 claim lines, I replicated 54 of them exactly, 15 of them within half a percentage point, and 3 of them within one and a half percentage points. Likewise, Exhibit 2 shows that, out of the 72 possible percentile comparisons based on at least 255 claim lines, I replicated 56 of them exactly, 13 of them within half a percentage point, and 3 of them within one and a half percentage points.

16. The results of my replication of Dr. Foreman's 5000 CPT study are presented in Exhibits 3 and 4. The exhibits differ according to the analyses that Dr. Foreman performed (i.e., weighted average percent difference analysis or greater, equal to, or less than analysis).[13] Again, the exhibits show that I was able to replicate Dr. Foreman's 5000 study very closely. For instance, Exhibit 3 shows that, out of the 88 possible percentile comparisons based on at least 9

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[10] Foreman 11-24-10 Decl., ¶ 162.

[11] Foreman 11-24-10 Decl., ¶¶ 161, 165, and 166.

[12] The weighted average percent difference represents the average percent difference between the contributor data charge amount and the Ingenix data charge amount for each percentile weighted by the number of Ingenix claim lines for each CPT-geozip combination.

[13] The greater, equal to, or less than analysis indicates the percentage of the CPT-geozip combinations that have the contributor data charge amount greater, equal to, or less than the Ingenix data percentile charge amount. Dr. Foreman reports the results of this analysis for the 5000 CPT study only.

claim lines, I replicated 51 of them exactly, 33 of them within half a percentage point, and 4 of them within one and half percentage points. Similarly, Exhibit 4 shows that, out of the 33 greater, equal to, or less than comparisons, I replicated 13 of them exactly, 19 of them within half a percentage point, and 1 comparison within one percentage point.

17. Based on my replication efforts, I learned that the 500 CPT study and the 5000 CPT study suffer from most of the same flaws as Dr. Foreman's earlier CPT studies.[14] First, both studies continue to compare the wrong time periods. As I understand it, plaintiffs' main allegation is that Ingenix has removed too many claim lines with high charges when cleaning the contributor data and that this is what has caused the percentiles in the PHCS releases to be suppressed. However, to examine this issue, one should be working with the exact same data that Ingenix worked with when creating its percentiles. Otherwise, there is no way of telling whether any difference between Dr. Foreman's percentiles and the Ingenix PHCS percentiles is due to suppression of the data distributions (as alleged) or whether it is simply due to Dr. Foreman having created his percentiles using different data. Dr. Foreman has not used the same data that Ingenix used.[15] In particular, he generated all of his percentiles using charge data that are drawn from later time periods than what Ingenix used. For example, his comparison in the 500 CPT study of "contributor 2006" with "Ingenix PHCS Release 2005-1" is really comparing Dr. Foreman's percentiles based on contributor charge data from calendar year 2006 with Ingenix percentiles based on contributor charge data from March 2004 through February 2005. Likewise, his comparison in the 5000 CPT study of "contributor 2008" with "Ingenix PHCS Release 2008-2"—which Dr. Foreman would consider to be his most "current" comparison—is really comparing Dr. Foreman's percentiles based on contributor charge data from calendar year 2008 with Ingenix percentiles based contributor charge data from September 2007 through August 2008. These are apples to oranges comparisons, which cannot reliably address the alleged suppression issue. This criticism was raised in my earlier report, as Dr. Foreman made the same type of calculations for his 300 and 350 CPT studies as well.

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[14] Dr. Foreman acknowledged in his recent deposition that his 300 and 350 CPT studies included a number of errors. [Foreman 10-11-11 Dep., pp. 28-32] He also stated that he is no longer relying upon the 300 and 350 CPT studies for any of the opinions that he is offering in this litigation. [Foreman 10-11-11 Dep., p. 34]

[15] Dr. Foreman acknowledged this at his recent deposition. [Foreman 10-11-11 Dep., pp. 111-113]

18. Second, both studies continue to analyze contributor data from geographic areas that do not match the geographic areas used by Ingenix. As before, Dr. Foreman created his geozips using the first three digits from the service location zip code. However, his programs still include an error that results in the charges performed in zip codes that end in "00" being put into an incorrect geozip.[16] For example, the zip code 32700 should be in geozip 327 but his programs still put any charge from zip code 32700 into geozip 326. This criticism was raised in my earlier report and no correction to his programming has been made for his 500 and 5000 CPT studies. More importantly, Dr. Foreman still does not seem to realize that combining zip codes by their first three digits does not always correspond to how Ingenix groups zip codes into geozips.[17] Instead, he should have taken the first three digits and then used the Ingenix geozip mapping to create the comparable geozip groupings. Because of these two errors, Dr. Foreman's geozips match the Ingenix geozips less than 50 percent of the time.[18] [See Exhibit 5.] This means that Dr. Foreman's analyses cannot tell us whether any differences between Dr. Foreman's percentiles and the Ingenix percentiles in his two studies are due to alleged suppression or to Dr. Foreman having compared the wrong geozips. Again, this criticism was raised in my earlier report and no correction has been made by Dr. Foreman in his latest two studies.

19. Third, both studies continue to address the multiple units issue incorrectly. The multiple units issue has to do with some of the claim lines containing more than one unit, which indicates that the physician performed the procedure or service more than one time. In those instances, Ingenix determines a charge per unit for each claim line but then counts the claim line multiple times (depending on the number of units) when computing its percentiles, as is appropriate. For example, this is how Mr. Mullins, who is one of the named provider plaintiffs, billed for his therapeutic services.[19] On a given patient, he billed two units of 15 minutes each

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[16] See Dr. Foreman's computer programs titled "contrib_06_xxM-rev.sas," "Contrib2007_ext_rev.sas," and "cont_2008_ext.sas."

[17] Dr. Foreman acknowledged this at his recent deposition. [Foreman 10-11-11 Dep., pp. 100-102] He also stated that it would be appropriate to use the same geozips as Ingenix used. [Foreman 10-11-11 Dep., p. 103]

[18] Even this percentage is overstated since my matching analysis accounts for the grouping issue only. That is, it does not account for the error in his computer programs.

[19] Mullins 2-22-10 Dep., pp. 89, 97, and 132.

for therapeutic exercises (CPT 97110) for a total of $128 for 30 minutes of care, or $64 per unit. In his 5000 CPT study, Dr. Foreman indicates that he has accounted for this issue by taking the "total charge" and dividing it by the number of units.[20] However, an examination of Dr. Foreman's programs shows that, instead of dividing the "total charge" by the number of units, he actually divided the "charge per unit" by the number of units—creating a charge measure that has no meaning.[21] Table 1 below illustrates this point with five examples taken from Dr. Foreman's 2007 data. Moreover, even if he had done the calculation correctly, this would still

Table 1 – Examples of Dr. Foreman's Incorrect Charges Based on His Attempt to Account for Multiple Units in His 5000 CPT Study for 2007

Ingenix Generated Variables			Dr. Foreman Generated Variable
Original Charge	Number of Units	Charge Per Unit	RCHARGE
(1)	(2)	(3) (1) / (2)	(4) [(1)/(2)]/(2)
$ 160.00	2	$ 80.00	$ 40.00
$ 50.23	10	$ 5.02	$ 0.50
$ 180.00	2	$ 90.00	$ 45.00
$ 145.00	11	$ 13.18	$ 1.20
$ 3750.00	25	$ 150.00	$ 6.00

not have solved the multiple units issue since his methodology would have continued to count the claim line just once. In addition, although Dr. Foreman acknowledges that he does not control for units in his 500 CPT study (given the supposedly negligible impact of them), an examination of the program that he used to determine their impact shows that, once again, he

[20] Foreman 11-24-10 Decl., ¶ 162.

[21] See Dr. Foreman's computer programs titled "contrib._06_xxM-rev.sas," "Contrib2007_ext_rev.sas," and "cont_2008_master.sas." They show that Dr. Foreman created his charge measure by dividing CHARGE by DAYS_UNITS. The dictionary for the contributor data shows that CHARGE represents the "Provider's billed charge (divided by units if applicable)." [repos_dictionary for contributor data.pdf (INGENIXMDL000778018)] Therefore, Dr. Foreman should have used ORIG_CHARGE to create his charge measure, which represents the "Original billed charge (before being divided if applicable)." [repos_dictionary for contributor data.pdf (INGENIXMDL000778018)]

divided the "charge per unit" by the number of units.[22] Thus, he has no basis for claiming that the multiple units have a negligible impact.

20. Finally, both studies continue to include (1) facility claims and (2) duplicate claims when generating the percentiles for the medical and surgical modules. I refer to these problems as the proc type "C" issue and the duplicates issue, which I will discuss in more detail below. Obviously, including facility claims in the analysis of physician claims can have a significant distorting impact on the results since those claims often have much larger charge amounts than the charge amounts on the physicians' professional claims that Ingenix is trying to profile. Likewise, including duplicate claims in the analysis could also skew the results depending on the charge amounts of those duplicate claims. These concerns were also raised in my earlier report critiquing Dr. Foreman's previous studies.

21. Besides having many of the same flaws as his earlier CPT studies (which may be due in part to no one having checked the coding of any of his four CPT studies),[23] Dr. Foreman's 500 CPT study and 5000 CPT study have some errors that are unique to the two new studies. For example, both studies exclude radiology CPT codes from the analysis, even though the radiology codes are among the top 500 and top 5000 CPT codes in the medical and surgical modules. In particular, the 500 CPT study includes radiology codes in the list of the top 500 CPT codes but then drops them from the analysis, while the 5000 CPT study does not even include them in the list of the top 5000 CPT codes.[24] Likewise, both studies use the same set of 421 geozips each year.[25] However, these geozips are based on the Ingenix PHCS Releases 2006-1 and 2006-2 and are not appropriate for the other years since the Ingenix geozips change each

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[22] See Dr. Foreman's computer program titled "contrib_08_xxM_rev.sas."

[23] Foreman 10-11-11 Dep., p. 99.

[24] See Dr. Foreman's computer programs for the 500 CPT study titled "Percentiles_2006.sas," "Percentiles_2007.sas," and "Percentiles_2008.sas" and his computer programs for the 5000 CPT study titled "Percentiles_2006_rev.sas" and "Percentiles_2008_rev2.sas." Also, see Dr. Foreman's SAS log file for the 5000 CPT study titled "2007 percentiles.rtf."

[25] See Dr. Foreman's computer programs for the 500 CPT study titled "Percentiles_2006.sas," "Percentiles_2007.sas," and "Percentiles_2008.sas," and his computer programs for the 5000 CPT study titled "Percentiles_2006_rev.sas" and "Percentiles_2008_rev2.sas." Also, see Dr. Foreman's SAS log file for the 5000 CPT study titled "2007 percentiles.rtf."

year.[26] In addition, the 500 CPT study uses the same list of CPT codes each year (based on the 2007 contributor data),[27] while the 5000 CPT study uses the same 4,888 CPT codes for 2006 and 2007 but 5,171 CPT codes for 2008.[28] Dr. Foreman should have used different lists of CPT codes for each year since the top 500 CPT codes and top 5000 CPT codes changed each year. Finally, when removing CPT-geozip combinations with less than 255 claim lines from the 500 CPT study, Dr. Foreman only dropped combinations when Ingenix claim lines were less than 255.[29] If we assume that Dr. Foreman is correct that percentiles based on fewer than 255 charges are unreliable, he also should have dropped his own percentiles when he created them based on fewer than 255 claim lines in his contributor data. But Dr. Foreman only applied his restriction to the Ingenix percentiles and not to his own percentiles.[30] This error was also pointed out in my earlier report.

C. Revision

22. Given all of the flaws with Dr. Foreman's 500 and 5000 CPT studies, it is not possible that his results can shed any light on the question of whether the percentiles in the Ingenix PHCS releases have been systematically suppressed. Therefore, to investigate how these flaws may have influenced his results, I re-estimated the 500 and 5000 CPT studies using Dr. Foreman's basic methodology but correcting all of the errors mentioned in the previous section.

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[26] This can be confirmed by comparing Dr. Foreman's geozip list to that for the Ingenix PHSC product for Release 1 and 2 of 2006, Release 1 and 2 of 2007, and Release 1 of 2008.

[27] Dr. Foreman acknowledged this at his recent deposition. [Foreman 10-11-11 Dep., p. 36]

[28] See Dr. Foreman's computer programs for the 500 CPT study titled "Percentiles_2006.sas," "Percentiles_2007.sas," and "Percentiles_2008.sas," and his computer programs for the 5000 CPT study titled "Percentiles_2006_rev.sas" and "Percentiles_2008_rev2.sas." Also, see Dr. Foreman's SAS log file for the 5000 CPT study titled "2007 percentiles.rtf."

[29] This can be confirmed by examining Dr. Foreman's computer programs titled "compare_2006_10.sas," "compare_2006_20.sas," and "compare_2006_30.sas." These programs show that he does not carry the units variable or a claims count variable on which he drops.

[30] Another problem that is unique to the 500 CPT study is that Dr. Foreman performed different relative comparisons for 2007 than he performed for 2006 and 2008. That is, the table on page 30 of his 11-24-10 declaration indicates that the comparisons always involved release 1 and 2 of the prior year and release 1 of the current year. However, our replication results show that his comparisons for 2007 actually involved release 2 of the prior year (i.e., Ingenix PHCS Release 2006-2) and releases 1 and 2 of the current year (i.e., Ingenix PHCS Release 2007-1 and 2007-2).

23. Exhibits 6, 7, and 8 present the results of my re-estimation of the 500 CPT study. Exhibits 6 and 7 are in the same form as the summary tables presented by Dr. Foreman in his declaration for ease of comparison.[31] They show the weighted average percent difference for all percentiles of the Ingenix Releases 2007-1, 2007-2, and 2008-1. They differ according to how many claim lines there have to be for each CPT-geozip combination to be counted (i.e., at least 9 claim lines or at least 255 claim lines). Exhibit 8, on the other hand, is in the same form as the greater, equal to, or less than analysis that Dr. Foreman used for the 5000 CPT study.[32] This exhibit differs, however, from Dr. Foreman's in that it reports results for both the "at least 9 claim lines" requirement and the "at least 255 claim lines" requirement. As mentioned, Dr. Foreman reports the results of the greater, equal to, or less than analysis for the 5000 CPT study only.

24. The results of my re-estimation of the 500 CPT study shown in Exhibits 6 and 7 (which are summarized in Table 2 below) support the conclusion that there has been no suppression in the Ingenix PHCS percentiles. This is true regardless of (1) what percentile one is looking at, (2) how many claim lines are required for a CPT-geozip combination to be counted, or (3) whether the weighted average is based on the Ingenix claim lines or the contributor claims lines. For example, as shown in Table 2, Dr. Foreman reported that the weighted average percent differences for the 80th percentile (based on there having to be at least 9 claim lines) equaled 24.0 percent, 26.9 percent, and 28.3 percent, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. In contrast, after correcting his errors, Table 2 shows that the weighted average percent differences equaled only 0.70 percent, 0.86 percent, and 0.91 percent (based on Ingenix weights) and only -0.07 percent, 0.75 percent, and 0.72 percent (based on contributor weights). That is, the weighted average differences between the contributor 80th percentile estimate and the relevant Ingenix release for the 80th percentile are small—always below 1 percent. Similarly, as shown in Table 2, Dr. Foreman reported that the weighted average percent difference for the 80th percentile (based on combinations with at least 255 claim lines) equaled 23.9 percent, 26.7 percent, and 28.1 percent, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. In contrast, after correcting his errors, Table 2 shows that the weighted average

[31] Foreman 11-24-10 Decl., pp. 30-31.

[32] Foreman 11-24-10 Decl., p. 33.

percent differences equaled only 0.62 percent, 0.79 percent, and 0.84 percent (based on Ingenix weights) and only -0.18 percent, 0.64 percent, and 0.60 percent (based on contributor weights).

Table 2 - Re-estimation of Dr. Foreman's 500 CPT Study Weighted Average Percent Difference Analysis for 2007 Releases 1 and 2, and 2008 Release 1

Release			Percentile		
Contributor	Ingenix	Version	70th	80th	90th
			(1)	(2)	(3)
All					
2007	2007-1	Foreman	15.3 %	24.0 %	42.4 %
2008	2007-1	Foreman	17.3 %	22.4 %	37.7 %
2007-1	**2007-1**	**NERA**	**-0.05 %**	**0.70 %**	**1.92 %**
2007-1	**2007-1**	**NERA**	**-1.14 %**	**-0.07 %**	**1.48 %**
2008	2007-2	Foreman	19.4 %	26.9 %	46.1 %
2007-2	**2007-2**	**NERA**	**0.06 %**	**0.86 %**	**2.15 %**
2007-2	**2007-2**	**NERA**	**-0.36 %**	**0.75 %**	**2.48 %**
2008	2008-1	Foreman	21.2 %	28.3 %	47.4 %
2008-1	**2008-1**	**NERA**	**0.20 %**	**0.91 %**	**2.59 %**
2008-1	**2008-1**	**NERA**	**-0.24 %**	**0.72 %**	**2.73 %**
>255					
2007	2007-1	Foreman	15.1 %	23.9 %	42.2 %
2008	2007-1	Foreman	17.0 %	22.2 %	37.4 %
2007-1	**2007-1**	**NERA**	**-0.10 %**	**0.62 %**	**1.80 %**
2007-1	**2007-1**	**NERA**	**-1.22 %**	**-0.18 %**	**1.30 %**
2008	2007-2	Foreman	19.2 %	26.7 %	45.8 %
2007-2	**2007-2**	**NERA**	**0.01 %**	**0.79 %**	**2.05 %**
2007-2	**2007-2**	**NERA**	**-0.43 %**	**0.64 %**	**2.28 %**
2008	2008-1	Foreman	21.1 %	28.1 %	47.1 %
2008-1	**2008-1**	**NERA**	**0.16 %**	**0.84 %**	**2.50 %**
2008-1	**2008-1**	**NERA**	**-0.31 %**	**0.60 %**	**2.55 %**

Please see Exhibits 6 and 7 for more details.

25. Likewise, the results of my re-estimation of the 500 CPT study shown in Exhibit 8 (which are summarized in Table 3 below) also support the conclusion that there has been no

suppression in the Ingenix percentiles. This is true regardless of how many claim lines are required for a CPT-geozip combination to be counted. For instance, after correcting Dr. Foreman's errors, Table 3 shows that (based on combinations with at least 9 claim lines, i.e., the "All" category) the contributor values exceeded the Ingenix values 17.4 percent, 17.5 percent, and 16.3 percent of the time, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. In contrast, the Ingenix values exceeded the corrected contributor values 15.0 percent, 15.3 percent and 15.0 percent of the time, respectively, for the same releases.[33] Table 3 also

Table 3 - Re-estimation of Dr. Foreman's 500 CPT Study Greater, Equal to, or Less than Analysis for 2007 Releases 1 and 2, and 2008 Release 1

Release			Percent		
Contributor	Ingenix	Version	Greater	Equal	Less
			(1)	(2)	(3)
All					
2007-1	2007-1	NERA	17.4 %	67.6 %	15.0 %
2007-2	2007-2	NERA	17.5 %	67.2 %	15.3 %
2008-1	2008-1	NERA	16.3 %	68.7 %	15.0 %
>255					
2007-1	2007-1	NERA	15.2 %	70.8 %	14.0 %
2007-2	2007-2	NERA	15.7 %	70.2 %	14.1 %
2008-1	2008-1	NERA	14.4 %	71.8 %	13.8 %

Please see Exhibit 8 for more details.

shows that (based on combinations with at least 255 claim lines) the contributor values exceeded the Ingenix values 15.2 percent, 15.7 percent, and 14.4 percent of the time, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. In contrast, the Ingenix values exceeded the corrected contributor values 14.0 percent, 14.1 percent, and 13.8 percent of the time, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. These results are very symmetric and only about 1/6th of the combinations show a small difference where the

[33] And, for the same releases, the Ingenix values equaled the corrected contributor values 67.6 percent, 67.2 percent, and 68.7 percent of the time, respectively. In other words, when one goes back to the Ingenix contributor data and removes all of the processes to which plaintiffs object (as well as others to which plaintiffs do not object), the result is the exact same percentile value about two-thirds of the time; and of the remaining one-third of the observations, the contributor value is higher about half the time, and the Ingenix value is higher about half the time.

contributor values are higher than the Ingenix releases. As such, these results are inconsistent with there having been a systematic negative downward bias in the Ingenix percentiles.

26. Exhibits 9 and 10 present the results of my re-estimation of the 5000 CPT study. Again, the exhibits are in the same basic form as the summary tables presented by Dr. Foreman in his declaration for ease of comparison.[34] The only difference is that Exhibit 10 reports the results for both the "at least 9 claim lines" requirement and the "at least 255 claim lines" requirement. In his summary tables for the 5000 CPT study, Dr. Foreman reported only the results for the "at least 9 claims lines" requirement.

27. The results of my re-estimation of the 5000 CPT study shown in Exhibit 9 (which are summarized in Table 4 below) support the conclusion that there is no suppression in the Ingenix PHCS percentiles. This is true regardless of (1) what percentile one is looking at or (2) whether the weighted average is based on the Ingenix claim lines or the contributor claims lines. For example, as shown in Table 4, Dr. Foreman reported that the weighted average percent differences for the 80th percentile equaled 14.3 percent, 18.5 percent, and 21.4 percent, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. In contrast, after correcting his errors, Table 4 shows that the weighted average percent differences equaled only 0.82 percent, 0.96 percent, and 1.00 percent (based on Ingenix weights) and only 0.08 percent, 0.83 percent, and 0.79 percent (based on contributor weights). Likewise, as shown in Table 4, Dr. Foreman reported that the weighted average percent differences for the 90th percentile equaled 32.6 percent, 40.0 percent, and 42.4 percent, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. In contrast, after correcting his errors, Table 4 shows that the weighted average percent differences equaled only 2.11 percent, 2.31 percent, and 2.72 percent (based on Ingenix weights) and only 1.72 percent, 2.62 percent, and 2.83 percent (based on contributor weights).

[34] Foreman 11-24-10 Decl., pp. 32-33.

Table 4 - Re-estimation of Dr. Foreman's 5000 CPT Study Weighted Average Percent Difference Analysis for 2007 Releases 1 and 2, and 2008 Release 1

Release			Percentile		
Contributor	Ingenix	Version	70th	80th	90th
			(1)	(2)	(3)
All					
2007	2007-1	Foreman	6.8 %	14.3 %	32.6 %
2008	2007-1	Foreman	10.5 %	16.4 %	34.9 %
2007-1	**2007-1**	**NERA**	**0.03 %**	**0.82 %**	**2.11 %**
2007-1	**2007-1**	**NERA**	**-1.07 %**	**0.08 %**	**1.72 %**
2007	2007-2	Foreman	9.0 %	18.5 %	40.0 %
2008	2007-2	Foreman	11.8 %	20.2 %	41.4 %
2007-2	**2007-2**	**NERA**	**0.13 %**	**0.96 %**	**2.31 %**
2007-2	**2007-2**	**NERA**	**-0.30 %**	**0.83 %**	**2.62 %**
2008	2008-1	Foreman	13.2 %	21.4 %	42.4 %
2008-1	**2008-1**	**NERA**	**0.26 %**	**1.00 %**	**2.72 %**
2008-1	**2008-1**	**NERA**	**-0.19 %**	**0.79 %**	**2.83 %**

Please see Exhibit 9 for more details.

28. Similarly, the results of the re-estimation of the 5000 CPT study shown in Exhibit 10 (which are summarized in Table 5 below) also support the conclusion that there has been no systematic downward bias in the percentiles. This is true regardless of how many claim lines are required for the CPT-geozip combinations to be counted. For example, as shown in Table 5, Dr. Foreman reported that the contributor values exceeded the Ingenix values (based on combinations with at least 9 claim lines, i.e., the "All" category) 53.1 percent, 45.9 percent, and 54.2 percent of the time, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. These results allegedly indicate that the Ingenix percentiles are understated roughly half the time. However, after correcting his errors, Table 5 shows that the contributor values exceeded the Ingenix values only 19.6 percent, 19.8 percent, and 18.7 percent of the time, respectively, for the same releases. It also shows that the Ingenix values exceeded the contributor values 12.7 percent, 13.0 percent, and 12.7 percent of the time, with two-thirds of the values remaining the same. Likewise, even though Dr. Foreman did not report his results based on combinations with at least 255 claim lines, I estimated what would have happened to those combinations if all of

Dr. Foreman's errors had been fixed. Table 5 also shows that, after correcting Dr. Foreman's methodological errors, the contributor values exceeded the Ingenix values only 15.4 percent, 15.8 percent, and 14.7 percent of the time, respectively, for the Ingenix Releases 2007-1, 2007-2, and 2008-1. It also shows that the Ingenix values exceeded the contributor values 14.1 percent, 14.3 percent, and 14.0 percent of the time, with about 70 percent of the values remaining the same. Once again, the corrected results are very symmetric—that is, over two-thirds of the combinations are unchanged; and of the remaining one-third of the combinations, about half the time the contributor value is higher and about half the time the Ingenix value is higher.

Table 5 - Re-estimation of Dr. Foreman's 5000 CPT Study Greater, Equal to, or Less than Analysis for 2007 Releases 1 and 2, and 2008 Release 1

Release			Percent		
Contributor	Ingenix	Version	Greater	Equal	Less
			(1)	(2)	(3)
All					
2007	2007-1	Foreman	53.1 %	21.5 %	25.4 %
2008	2007-1	Foreman	60.3 %	15.0 %	24.6 %
2007-1	**2007-1**	**NERA**	**19.6 %**	**67.7 %**	**12.7 %**
2007	2007-2	Foreman	45.9 %	30.0 %	24.1 %
2008	2007-2	Foreman	57.4 %	17.8 %	24.8 %
2007-2	**2007-2**	**NERA**	**19.8 %**	**67.2 %**	**13.0 %**
2008	2008-1	Foreman	54.2 %	21.6 %	24.2 %
2008-1	**2008-1**	**NERA**	**18.7 %**	**68.6 %**	**12.7 %**
>255					
2007-1	**2007-1**	**NERA**	**15.4 %**	**70.5 %**	**14.1 %**
2007-2	**2007-2**	**NERA**	**15.8 %**	**69.9 %**	**14.3 %**
2008-1	**2008-1**	**NERA**	**14.7 %**	**71.3 %**	**14.0 %**

Please see Exhibit 10 for more details.

29. Finally, Dr. Foreman says that the results of the 500 CPT study and 5000 CPT study are qualitatively similar to the results of his earlier CPT studies. Although he interprets them to all suggest there has been systematic suppression in the Ingenix PHCS percentiles, the sizeable differences in his results demonstrate that his findings are not reliable. In particular, the

estimated weighted average percent differences differ dramatically from study to study. For example, Table 6 shows that the weighted average percent differences based on the 80th percentile for the 2007 Release 1—the only data comparison that is common across Dr. Foreman's four studies—range from a low of 10.8 percent for the 350 CPT study to high of 24.0 percent for the 500 CPT study, with the 5000 CPT study and 300 CPT study equal to 14.3 percent and 15.0 percent, respectively. These large differences should have raised a red flag that his methodology is unreliable.

Table 6 – Weighted Average Percent Difference Comparison Based on 80th Percentile for 2007 Release 1

		NERA	
Study	Foreman	Ingenix-based	Contributor-based
	(1)	(2)	(3)
300 CPT Study	15.0 %	0.6 %	-0.2 %
350 CPT Study	10.8 %	0.6 %	-0.2 %
500 CPT Study	24.0 %	0.7 %	-0.1 %
5000 CPT Study	14.3 %	0.8 %	0.1 %

30. Moreover, Dr. Foreman's four CPT studies use large samples of data to investigate the same question. As such, they should have produced consistent estimates as to the average differences between the contributor data and the Ingenix results. However, Dr. Foreman's results differ dramatically from study to study. This is due to each study suffering from a number of flaws. As Table 6 also shows, when these errors are corrected, there is no evidence of systematic suppression and the results of the studies are consistent—all of the average differences are less than 1 percent. That is, the corrected results indicate that the magnitude of the weighted average differences are about the same across the four studies—which is what one would expect if the analysis had been done using a reliable methodology. The dramatic differences in Dr. Foreman's results indicate that his methodologies are unreliable, inconsistent, flawed, and not scientifically sound.

IV. DR. FOREMAN'S OTHER ASSERTIONS ABOUT HIS CPT STUDIES

A. Proc Type "C"

31. In his new declaration, Dr. Foreman asserts that the contributor data he has used for his CPT studies do not include any facility claims.[35] Specifically, he asserts that he has eliminated those claims by using the "type of service" indicator and the modifier codes.[36] Moreover, Dr. Foreman testified at his recent deposition that he agrees that claims with facility fees should be excluded when generating medical surgical percentiles. He also agrees that he has not done it correctly in any of his four CPT studies.[37]

32. As I stated in my earlier report, the most accurate way to eliminate the facility claims is to use the "proc type" indicator. Through my interviews with Ms. Carla Gee of Ingenix, I learned that the contributors sometimes include facility claims in the charge data that they submit to Ingenix. These facility claims use CPT codes that are also used by physicians, but they are actually claims for reimbursement for use of a facility and not a claim for physician service performed at the facility—as would be filed by a physician and properly included in the Ingenix data distributions of physician charges. I also learned that Ingenix examines all of the claims that it receives from the contributors and assigns the proc type indicator a value of "C" for those claims it believes should be included in the medical and surgical modules for physicians. Claims from facilities are given different proc type codes, such as "O" (outpatient), "S" (ambulatory surgery center), "F" (free standing facility), or "I" (inpatient facility). I further learned that many of the facility claims can be identified by looking at the data fields and other characteristics of the claim, for example, the claim form under which the claim was submitted—the UB Form typically indicating that the claim represents a facility claim. Finally, I learned that the type of service indicator (i.e., the field used by Dr. Foreman) cannot be used to identify the facility claims since it does not distinguish between professional and facility claims.

33. Before adopting the proc type "C" approach in my earlier work, I had examined the contributor data to see if this indicator was more accurate than the type of service indicator

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[35] Foreman 11-14-10 Decl., ¶ 239.

[36] Foreman 11-14-10 Decl., ¶ 239.

[37] Foreman 10-11-11 Dep., pp. 44-45 and 125-127.

that Dr. Foreman had used. As I mentioned in my earlier report, I found that using the type of service indicator created obvious distortions in Dr. Foreman's results—for instance, his estimate of the 80th percentile for CPT 90935 (Hemodialysis, One Evaluation) in one geozip using the contributor data was nearly 15,000 percent higher than the supposedly comparable Ingenix 80th percentile that he compared it to.[38] I found many examples like this in Dr. Foreman's results.

34. Given Dr. Foreman's latest assertion that the contributor data he has used for his two new CPT studies do not include any facility claims, I have further investigated this issue. To do so, I started off with all of the 2008 contributor data and then applied the same editing rules that Dr. Foreman applied to create the percentiles for his 500 CPT study.[39] These rules include (1) limiting the analysis to the top 500 CPT codes and his 421 geozips, (2) dropping all claims with a blank CPT code, a zero or negative charge amount, or where the charge amount is less than the allowed amount, (3) keeping only claims that do not involve a modifier, and (4) using the type of service indicator, which Dr. Foreman claims he used eliminate facility claims.[40] Applying Dr. Foreman's editing rules, I reduced the 2008 contributor data from 1,535,201,117 claim lines to 434,402,860 claim lines. This is the same dataset that I used to replicate Dr. Foreman's 500 CPT study.

35. Once I re-created Dr. Foreman's dataset, I proceeded by examining what proc type all of the claims have. As stated above, the "proc type" is the data field used by Ingenix to denote whether a claim line reflects a charge for provider services or for a facility charge. Exhibit 12 presents the results of this analysis. It shows that almost 94 percent of the claim lines are proc type "C". However, it also shows that more than 6 percent of the claim lines have a proc type other than "C." These include claim lines that have a proc type indicating a facility claim (i.e., "O," "S," "F," and "I") as well as claim lines that Ingenix could not rule out as being a facility claim (i.e., "N" for "not allocated").

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[38] McCarthy 11-10-10 Report, ¶ 140.

[39] These rules are contained in his program titled "contrib._08_xxM.sas."

[40] Interestingly, even though Dr. Foreman indicates in his new declaration (¶ 239) that he limited his 500 CPT study to just those claim lines that had a type of service equal to 1, the results of my analysis show that is not case. Of the 434,402,860 claim lines that remain in the dataset after applying Dr. Foreman's editing rules, more than 25 percent of them have a type of service that does not equal 1. [See Exhibit 11.]

36. I next proceeded by investigating examples of proc types "C," "O," "S," and "N" for selected CPT-geozips in Dr. Foreman's dataset. The CPT-geozips that I studied are a subset of the same high-frequency ones that I examined in my earlier report.[41] I had to use a subset in order to examine CPT-geozip combinations that had a number of claim lines for each proc type. Recognizing that Dr. Foreman has criticized Ingenix's practice of publishing percentile values for CPT-geozip combinations where there are as few as 9 claim lines (but without accepting his criticism as valid), I used a cut-off of at least 40 claim lines per proc type (I am not adopting this number as a necessary minimum; rather, it is my understanding that this is the cut-off that is going to be used by the FAIR Health Plan).[42] The specific claim lines that I choose for each CPT-geozip combination are those examples that had the median charge or 80th percentile charge for each proc type. Exhibits 13A through 13L present the results. They show that the median charge and 80th percentile charge for a given CPT-geozip combination can differ dramatically across proc types. They also show that the differences can often be tied directly to the CLAIM_TYPE field.[43]

37. For example, Exhibit 13A is for CPT 20610 (arthrocentesis, aspiration, and/or injection of major joint/bursa) and geozip 021 (Boston and Cambridge, Massachusetts). It shows that the claim lines with proc type "C" (indicating charges for provider services) have a median charge of $180 compared to the claim lines with proc type "O" (indicating charges for outpatient services) that have a median charge of $547—about three times as high.[44] It also shows that the claim lines with proc type "C" have a claim type of "H" (i.e., a HCFA 1500 Form), whereas the claim lines with proc type "O" have a claim type of "U" (i.e., a UB Form). Again, a UB Form typically indicates that the claim represents a facility claim. Finally, it shows that all of the claim lines have the same type of service (TOS) equal to "2."[45] Thus, the type of service indicator used

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[41] McCarthy 11-10-10 Report, ¶ 53.

[42] FAIR Health document titled "Summary of FAIR Health Phase I Rate Table Methodology, September 2010."

[43] The exhibits list all of the different fields and data values contained in the 2008 contributor data for each of the proc type examples. See "repos_dictionary for contributor data" (INGENIXMDL000778017-18) for a description of all of the fields.

[44] The results based on the 80th percentile charge for this CPT-geozip combination are basically the same. [See Exhibit 13B.]

[45] Type of service equal to "2" represents "Medical Care.".

by Dr. Foreman clearly does not work to distinguish a physician claim from a facility claim for this CPT-geozip combination.

38. Likewise, Exhibit 13H is for CPT 45378 (colonoscopy) and geozip 100 (Manhattan, New York). It shows that the claim lines with proc type "C" (indicating charges for provider services) have an 80th percentile charge of $1,600 compared to the claim lines with proc types "O" (indicating charges for outpatient facilities) and "S" (indicating charges for ambulatory surgical centers), which have 80th percentile charges of $2,924 and $3,710, respectively.[46] Again, it also shows that the claim lines with proc type "C" have a claim type of "H" (i.e., a HCFA 1500 Form), whereas the claim lines with proc types "O" and "S" have a claim type of "U" (i.e., a UB Form). Finally, it shows that all of the claim lines have the same TOS equal to "2." Again, all of these claim lines are contained in the dataset that Dr. Foreman used for his 500 CPT study.

39. My above investigation of the proc types indicates that Dr. Foreman has included some facility claims in the dataset that he used for his 500 CPT study. To expand on that analysis of specific examples, I next proceeded by examining all of the CPT-geozip combinations where each of the proc types of interest (i.e., "C," "O," "S," "F," "I," and "N") had at least 40 claim lines. Through this analysis, the results of which are summarized in Exhibit 14, I compared the charges with proc type "C" to charges with the other proc types, using a statistical test known as a Kolmogorov-Smirnov test. The purpose of this test was to examine whether the proc types that were not included by Ingenix (because they represent facility charges, not provider service charges) but were included by Dr. Foreman tended to be statistically dissimilar to the claim lines with proc type C, which were included by Ingenix. In the overwhelming majority of CPT-geozip combination, my analysis rejects the null hypothesis that the claim lines with proc type "C" come from the same population as the claim lines with the other proc types that were included by Dr. Foreman. These results strongly support the conclusion that Dr. Foreman has erroneously included facility claims in the dataset that he has used for his 500 CPT study and that these charges are very different from the proc type "C" claim lines that Ingenix uses to compile percentile values for provider service charges.

[46] The results based on the median charge for this CPT-geozip combination are basically the same. [See Exhibit 13G.]

40. Although my distribution analysis demonstrates that the claim lines with proc type "C" tend to be dissimilar to the claim lines with the other proc types, it does not indicate whether the claim lines for the other proc types would distort the percentile estimates if left in the dataset—that is, it does not indicate whether the facility claims have higher charges or lower charges that would distort the percentile estimates made by Dr. Foreman. To examine this issue, I first investigated the direction of the difference using only those CPT-geozip-proc type combinations that have statistically different distributions. Exhibit 15 presents the results, which again are based on the dataset that Dr. Foreman used for his 500 CPT study. The results show that, for the proc type "C" versus the proc type "O," "S," and "I" comparisons, the proc type "C" charges are lower in the vast majority of the time—ranging from 73.8 percent of the time up to 92.2 percent of the time. The results also show that, even though the findings for the proc type "C" versus proc type "N" comparison are not as dramatic, the proc type "C" charges are still lower than the proc type "N" charges much more often than they are higher. Since facility claims typically have higher charges than provider service claims, these results further support the conclusion that Dr. Foreman has included facility claims in the database that he has used for his 500 CPT study. They also indicate that these erroneously included claims have significantly skewed his contributor percentile estimates upward, causing him to wrongly conclude that the Ingenix percentile estimates are suppressed.

41. Finally, to complete my analysis, I examined the magnitude of the difference using the same data as for the prior exhibit. Exhibit 16 presents the results. The exhibit lists the average "median" charges, the average "80th percentile" charges, and the difference in charges for all of the different proc type comparisons. In particular, the exhibit shows that, for each proc type comparison, the proc type "C" claim lines have much lower average charges than the other proc type claim lines. For example, the comparison of proc type "C" to proc type "O" shows that the proc type "C" claim lines have an average median charge and an average 80th percentile charge that are $377.60 and $579.61 less, respectively, than the average charges for the proc type "O" claim lines. Likewise, the comparison of proc type "C" to proc type "S" shows that the proc type "C" claim lines have an average median charge and an average 80th percentile charge that are $1,370.15 and $2,054.46 less, respectively, than the average charges for the proc type "S" claim lines. Again, these results support the conclusion that Dr. Foreman has included facility claims in the dataset he has used for his 500 CPT study. They also indicate that Dr. Foreman has

included facility claims in the dataset for his 5000 CPT study since many of the claim lines in that dataset also have the other proc types. In both cases, the result of Dr. Foreman's mixing of facility claims with the physician claims is to make his percentile estimates unreliable for assessing physician charges for their services. In short, Dr. Foreman is measuring something that does not represent what Ingenix has set out to measure. That Dr. Foreman's percentiles are higher for the affected CPT-geozip combinations does not indicate that the Ingenix percentiles have been suppressed, but rather that Dr. Foreman has measured something different. As such, Dr. Foreman's results are unreliable for detecting or measuring any supposed suppression in the Ingenix percentiles, and they contribute to his unreliable and erroneous finding of "systematic suppression."

B. Duplicate Records

42. In his new declaration, Dr. Foreman also asserts that the contributor data he has used for his analysis do not include any duplicate claims.[47] Dr. Foreman testified at his recent deposition that he agrees duplicates should be excluded, that he now acknowledges that there are some duplicates in the contributor data that should be removed, and that he does not fully understand the Ingenix process for removing duplicates.[48]

43. Through my interviews with Ms. Carla Gee, I learned that Ingenix asks the contributors not to submit duplicate claims but some of them do. I also learned that the contributors can give Ingenix a maximum of 50 fields of data but some differ on the amount they submit. I further learned that Ingenix will examine the claims to identify which of them represent duplicate claims. Where Ingenix can confirm that there are duplicate claims, Ingenix places a particular flag on the duplicate claim lines and excludes the duplicate claim lines from the data set. In addition, there are circumstances in which all of the fields for multiple claim lines are identical, but Ingenix cannot confirm that the claim lines are duplicates. In these circumstances, Ingenix will consider all of the claims to be non-duplicate claims even if some of the claim lines contain the exact same data values for the fields provided. Finally, I learned that Ingenix uses the MDR_FLAG field to identify those claims that it can confirm are duplicate

[47] Foreman 11-24-10 Decl., ¶ 242.

[48] Foreman 10-11-11 Dep., pp. 24-26, 117-119, and 134.

claims. If Ingenix determines that a claim is a duplicate claim, it will populate the MDR_FLAG field with an "S."[49]

44. To investigate the duplicates issue, I focused on those claim lines where Ingenix had populated the MDR_FLAG with an "S." I then examined whether there were other claim lines in the 2008 dataset that Dr. Foreman used for his 500 CPT study that had the exact same data values for the common fields as the claim lines where Ingenix had populated the MDR_FLAG field with an "S." I considered all of the fields other than the fields that Ingenix added after it received the data from the contributors (namely, the ERROR_FLAG, CT_FLAG, MDR_FLAG, ALM_FLAG, CUSTOM1, CUSTOM2, and CUSTOM3) to be common fields.[50]

45. Exhibit 17 presents the results. It contains sixty different examples of duplicate claims.[51] For instance, the first example shows that the dataset includes three claim lines that all contain the same information for the common fields. Ingenix has identified two of the claim lines as duplicate claims by populating the MDR_FLAG field with an "S." Likewise, the nineteenth example shows that the dataset includes four claim lines that all contain the same information for the common fields. Again, Ingenix has identified the duplicate claims by populating the MDR_FLAG field with an "S." Clearly, these results demonstrate that the dataset that Dr. Foreman has used for the 500 CPT study inappropriately include duplicate claims. He should have eliminated these claims from his analysis.[52]

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[49] Dr. Foreman seemed to be mistaken about this issue at his recent deposition. In particular, he testified that Ingenix used proc type "S" to identify duplicates.]Foreman 10-11-11 Dep., p. 119] However, as mentioned above, Ingenix uses proc type "S" to identify ambulatory surgery center claims and not duplicates.

[50] See "repos_dictionary for contributor data" (INGENIXMDL000778017-18) for a description of these fields.

[51] As mentioned, Ingenix takes a more conservative approach to identifying duplicate claims and does not count many the claim lines even if they contain the exact same data values for all of the common fields. If all claim lines are included in the analysis, my results indicate that as many as 11 percent of the claim lines in the 2008 data that Dr. Foreman used for his 500 CPT study could represent duplicate claims, i.e., 11.0 percent = (47,780,963 / 434,402,860) * 100.

[52] This exhibit also shows that Ingenix has only populated the MDR_FLAG with an "S" if the BILL_ID_KEY field contains a value other than zero. Through my interviews with Ms. Carla Gee, I learned that Ingenix will only identify a claim to be a duplicate claim if it has enough information (e.g., claim identification number, patient identification number, etc.) to create a non-zero BILL_ID_KEY value. If two claim lines have the same BILL_ID_KEY number, that indicates they are dealing with the same patient.

V. DR. FOREMAN'S CRITIQUE OF MY CONSPIRACY OPINIONS

46. Most of Dr. Foreman's critiques of my conspiracy opinions cover issues that I already discussed in great detail in my earlier report. As such, I do not repeat all of that discussion in this report. Instead, I provide some general comments about the main points that Dr. Foreman appears to be trying to make.[53]

47. In ¶¶ 173-174 of his new declaration, Dr. Foreman claims that my opinions that the alleged conspiracy "does not make economic sense" and that the employers have strong interests in "holding down health care costs" are actually contradictory. However, these opinions are not contradictory since they are talking about different issues. The first opinion is talking about whether the alleged conspirators have the ability to conspire given Dr. Rausser's formulation of the alleged conspiracy and the fact scenario in this case. In contrast, the second opinion is talking about the incentives of some of the alleged conspirators—regardless of whether they have the ability to conspire—and the fact that efficient firms independently have an incentive to hold down costs. These are two different issues. Managed care companies can have an incentive to hold down the costs of medical care—which, after all, is one of the core value propositions that they provide to customers—without having the practical ability to engage in a vast conspiracy to restrain trade.

48. Dr. Foreman says in ¶178 of his new declaration that my opinion that the alleged conspiracy is economically implausible because firms would merely "compete away the profits from it" is wrong since (1) competition requires "many small buyers and sellers, homogeneous products, perfect information, and free entry and exit into the market" and (2) the health insurance industry does not exhibit these characteristics. Although Dr. Foreman is correct that the health insurance industry does not exhibit these characteristics, no other industry exhibits them as well. Dr. Foreman's definition of competition is the definition of "perfect competition," which is theoretical concept used only in textbooks. I know of no antitrust economist that has actually used this definition in practice when examining markets. Instead, antitrust economists typically use the standard of "reasonably competitive" or "workably competitive."

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[53] Dr. Foreman testified in recent deposition that his critiques represent "arguments or contentions as opposed to opinions." [Foreman 10-11-11 Dep., p. 217] He also testified that he is not providing any opinions in this litigation about the alleged conspiracy. [Foreman 10-11-11 Dep., p. 218]

49. In addition, Dr. Foreman's assertion that "[h]ealth insurance products are not homogeneous" is completely at odds with Dr. Rausser's assertion that they are "commoditized."[54] As such, this further invalidates one of the so-called plus factors that Dr. Rausser uses to argue that the alleged conspiracy has actually taken place. Finally, Dr. Foreman's assertion that "[s]elf-insurance plans . . . do not compete with traditional health insurance firms" ignores the reality of the health insurance market. In particular, employers have the option of either self-insuring or purchasing a fully-insured plan. Moreover, based on my experience, I have found that many employers have switched back and forth between these two options and that some employers (such as my own company) have used both options at the same time. This, of course, means that the self-insured plans do compete with the fully-insured plans since the employers have the option of choosing either type of plan.

50. In ¶ 180 of his new declaration, Dr. Foreman claims that my opinion that the current setting "involves insurers and self-insured employers supposedly joining a conspiracy to just be able to take money out of one pocket and put it in another" is wrong. Specifically, he argues that this is "not merely moving money from one pocket to another." As with many of his critiques, his conclusion is missing the fuller discussion. My analogy is talking about the impact of the insurers and self-insured employers choosing a higher percentile versus a lower percentile for purposes of determining how much the employees will have to pay for their out-of-network services. In the case of the insurers who offer traditional health insurance, this tradeoff clearly involves moving money from one pocket to another since most health insurance markets are reasonably competitive. That is, if the insurers set a lower (higher) percentile, this means they will end up paying lower (higher) medical claim costs, which in turn means the employers and employees will end up paying lower (higher) premiums. The insurers will not necessarily benefit one way or the other from this tradeoff, as it is driven largely by actuarial values and plan designs. Their profits will be roughly the same. Likewise, in the case of the self-insured employers, this tradeoff further involves the employers being able to recruit a more skilled workforce if the benefits are better. That is, if the self-insured employers set a lower (higher) percentile, this means they will be offering their employees a poorer (richer) benefits package,

[54] Expert Witness Report of Gordon Rausser, Ph.D., August 9, 2010 (hereafter "Rausser Merits Report"), ¶¶ 16 and 98.

which will result in them recruiting a lower (higher) quality workforce. Since a lower (higher) quality workforce may translate into smaller (larger) profits, the self-insured employers will not necessarily benefit from making this trade-off to lower percentile reimbursements. Again, Dr. Foreman has either ignored or missed the fuller discussion. Thus, spending more on health care benefits may be a profit-maximizing decision for an employer.[55]

51. In ¶¶ 182-193 of his new declaration, Dr. Foreman says that you would expect to see Aetna paying the vast majority of its out-of-network claims at full billed charges if it were engaged in a conspiracy to reduce out-of-network reimbursements. Although he presents several arguments to try to support this proposition, his logic is not compelling or even well-defined. If the goal of the alleged conspiracy is to reduce out-of-network reimbursements, why wouldn't it reduce the vast majority of them? By reducing only a small percentage of the claims, the alleged conspirators would be leaving a lot of money on the table. Assuming that an alleged conspiracy actually took place, this would not make a lot of sense. Dr. Foreman tries to argue that this would make sense for Aetna because the average billed charges to Aetna were smaller than the average billed charges for the other contributing insurers. However, if that were the case, why would Aetna have an incentive to join the alleged conspiracy in the first place? It could do just as well on its own without having to worry about being sued for participating in a conspiracy. Likewise, Dr. Foreman argues that, even though Aetna is paying 82.8 percent of its out-of-network claims at full billed charges, it is paying only 57 percent of the claims at full billed charges in terms of dollar value of the claims. Putting aside the issue of whether Dr. Foreman's calculation is correct (which based on his other statistical work is questionable), this would still mean that Aetna is leaving a lot of money on the table—which again is inconsistent with Aetna having engaged in an alleged conspiracy to reduce out-of-network reimbursements.

52. Dr. Foreman claims in ¶ 194 of his new declaration that the fact CIGNA used other methods to pay for most of its out-of-network claims (including wrapper networks) does

[55] A related point is that employers and insurers will always have an incentive to look for ways to eliminate *unnecessary* medical costs or *excessive* medical costs. That is, there will always be an incentive to manage costs and keep them as low as possible, while still being consistent with an appropriate level of benefits for the particular circumstances of the plan/employer. Thus, while spending more on health benefits may be a profit maximizing decision for an employer, there is never an incentive for a health plan or employer to transfer the resources of the plan sponsor or plan members to providers who charge excessive fees or who charge for unnecessary services.

not invalidate the effectiveness of the alleged conspiracy.[56] Although it is an unproven assertion that the use of other methods does not invalidate the alleged conspiracy's effectiveness, they clearly make it less plausible that the alleged conspiracy took place in the first place. For a conspiracy to take place, the conspirators need to be able to monitor the behavior of each other to ensure that they are not cheating. However, if the alleged conspirators are using a number of other methods to reimburse for the out-of-network services, and if the alleged conspirators have no way of monitoring these other methods, then there is no way that they can ensure that cheating will not take place. Thus, they would have no incentive to join the alleged conspiracy in the first place. In addition, to demonstrate that the alleged conspiracy was still effective in the case of the wrapper networks, Dr. Foreman would have to show that the patients ended up paying more for their out-of-network services than they would have under the Ingenix databases. Otherwise, this would not be an antitrust issue since the providers would be receiving their contractually agreed upon amounts and the patients would be paying less than under the Ingenix databases.

53. In ¶¶ 195-198 of his new declaration, Dr. Foreman tries to argue that if a provider decided to waive the balance bill, then the provider suffered antitrust injury. However, it is unclear how this could possibly represent antitrust injury since the provider in this hypothetical is making the decision where to set a list price and whether to accept the lower payment from that list price. Importantly, the lower payment is not being forced on the provider. The provider's acceptance of a lower amount is a measure of where that provider thinks the appropriate market price is. Otherwise, he/she risks chasing the patient away due to excessive pricing.

54. In ¶ 199 of his new declaration, Dr. Foreman claims that the relationship between health insurers' allowed amounts and the Medicare fee schedule is not relevant for assessing whether the providers and/or patients have suffered antitrust injury. Contrary to his assertion, the relationship is very relevant. To assess whether a party has suffered antitrust injury, one needs to show that (1) competition has been harmed and (2) the party was injured as a consequence. In the case at hand, the first part of this test requires showing that the allowed amounts are less than what would have been allowed and broadly accepted under competitive conditions. This, of

[56] Dr. Foreman makes a similar point in ¶ 207.

course, requires comparing the allowed amounts to some type of benchmark. That is where the Medicare fee schedule comes in. Since most providers participate in the Medicare program and accept the Medicare fee schedule as payment in full to treat Medicare patients, and since Aetna has found that most non-participating providers will accept 125 percent of the Medicare fee schedule as payment in full to treat commercial patients, the Medicare fee schedule represents a useful and reasonable benchmark for assessing whether competition was harmed. As stated in my earlier report, the fact that Ingenix 80th percentile amounts are so much larger than the Medicare fee schedule amounts supports the conclusion that neither the providers nor the patients have suffered antitrust injury based on the level of reimbursement being paid to out-of-network providers.[57]

55. Dr. Forman says in ¶ 203 of his new declaration that my contention that "there are too many alleged conspirators" may be wrong since there are "only a few large national health insurers (CIGNA, Aetna, Wellpoint, Humana, and United)." He also suggests in a footnote to that paragraph that I made this argument unsuccessfully in an earlier case. I have several comments to make about these assertions. First, my opinion about the number of alleged conspirators was based on Dr. Rausser's formulation of the alleged conspiracy. Although Dr. Foreman may be correct that there are not many large national health insurers, that would not change my opinion since there are other companies participating in Dr. Rausser's formulation of the alleged conspiracy. Second, even if you were to limit the alleged conspirators to just the large national health insurers, it is not clear how you would define these companies. For example, would the companies only include CIGNA, Aetna, Wellpoint, Humana, and United? Or would they also include HealthNet (who was sued in a similar litigation), Coventry, and Kaiser? Also, would they include the many other Blue plans, which are typically the largest insurer in each state, compete nationally through the Blue Card program, and sometimes operate plans in multiple states? Finally, Dr. Foreman, who also worked on the earlier case that he is referring to in the footnote, seems to forget that the judge in that matter granted summary judgment in favor of the health insurers, finding no evidence of a conspiracy to fix provider reimbursements despite Dr. Foreman's arguments to the contrary. Thus, contrary to

[57] McCarthy 11-10-11 Report, ¶¶ 28-29.

Dr. Foreman's assertion, there is no evidence that Aetna and United have "apparently conspired previously."

56. In ¶ 210 of his new declaration, Dr. Foreman claims that "[i]t would be easy for Aetna or CIGNA to enter the data market." However, he provides no support for this statement or suggests why this would make Aetna a better producer of the data than Ingenix. Aetna stopped generating its own percentiles voluntarily before the alleged conspiracy began. In ¶ 211, Dr. Foreman suggests that Aetna may have chosen to switch to the PHCS database in 1996 for conspiratorial reasons. This assertion, though, is completely at odds with plaintiffs' claim that the alleged conspiracy did not begin until 1998 when Ingenix acquired both the PHCS and MDR databases.

57. In ¶ 213 of his new declaration, Dr. Foreman either misunderstands what I wrote about the Linked Market or he is mischaracterizing what I said. Specifically, Dr. Foreman claims that I said the Linked Market was not a proper relevant market, in part, because "there is no separate market for buying and selling of out of network services."[58] That is not what I said. Dr. Rausser had defined the Linked Market to be the market for "the reimbursement of out-of-network healthcare services." What I said in my earlier report was that the Linked Market is not a proper relevant market, in part, because "reimbursements, in general, are not bought or sold."

58. Finally, Dr. Foreman claims in ¶ 215 of his new declaration that "[a] substantial portion of [my] conclusions – that the Ingenix databases have not been suppressed – relates to non-critical work of other defendants' experts submitted during the class certification stage." Of course, this statement is wrong. Although I do summarize the work of some of the other defendants' experts, my conclusion about the lack of suppression is based first and foremost (and sufficiently) on my replication and revision of Dr. Foreman's four CPT studies. The fact that well-executed analysis by other economists contradicts Dr. Foreman's findings and is consistent with my findings only reinforces the correctness of my analysis.

[58] Foreman 11-24-10 Decl., ¶ 213.

VI. DR. RAUSSER'S CRITIQUE OF MY INITIAL REPORT

59. As mentioned, Dr. Rausser's new declaration is a rehash of what he has written in his earlier reports and testified to at his depositions. Importantly, he says nothing new related to the conspiracy issues that I have not already responded to in my earlier report. As such, I only comment on some of the points that he makes in his new declaration.

60. In ¶ 11 of his new declaration, Dr. Rausser says that because the Benefits Manager of Owens Corning viewed Aetna's use of the Ingenix database as "reasonable," this means Owens Corning did not realize that the Ingenix percentiles were suppressed. Dr. Rausser, however, fails to consider the possibility that this means that the Ingenix percentiles were not suppressed since the Benefits Manager of Owens Corning considered Aetna's use of the Ingenix database to be "reasonable." I also add that there is no credible statistical evidence that the Ingenix profiles have been suppressed, so Dr. Rausser's conclusory statement is completely hollow. In this regard, I note that Dr. Rausser has testified that he has not examined the Ingenix data or tested for any supposed suppression—he has merely relied on Dr. Foreman's flawed and unreliable studies. It is hard to know the Ingenix percentiles have been systematically suppressed when there is no good evidence that they have been.

61. Dr. Rausser claims in ¶ 25 of his new declaration that Ingenix has exercised market power in the Data Market by suppressing the percentiles. He also suggests in ¶ 26 that Ingenix may have raised prices above competitive levels in that market since Captiva's price was less than 50 percent of Ingenix's price. As I mentioned in my earlier report, the exercise of market power typically involves either raising the price of the relevant product above competitive levels or lowering the quality of the relevant product below the level offered under competitive conditions.[59] Both outcomes directly decrease competition in the market in question. However, even if you assume that the Ingenix percentiles have been suppressed (which they have not), this would not represent an exercise of market power in the Data Market since competition in that market has not been negatively impacted. Even if Captiva's list price was 50 percent less than Ingenix's list price, a simple comparison of list prices reveals nothing about whether one of the prices is set at a supracompetitive level—particularly when the

[59] It can also involve reducing the rate of innovation.

products and services being compared are differentiated. A good steak may be priced many times higher than a Big Mac, but that does not mean the steakhouse has market power. Here, any difference between Ingenix's and Captiva's prices much more likely reflects the difference in the quality of the two products and the services from the vendor. In particular, it is my understanding that the Ingenix percentiles were based on a much larger and more extensive charges database than the Captiva percentiles. Moreover, many of the companies that purchased the Ingenix PHCS and MDR databases received large discounts. Thus, the price they actually paid may have been less than the Captiva price.

62. In ¶ 29 of his new declaration, Dr. Rausser says that the market for out-of-network reimbursements is not the relevant antitrust market he is interested in for this case. He is apparently taking this position in rebuttal to my opinion that the market for out-of-network reimbursements is not a properly defined relevant market. However, in ¶ 30 of his new declaration, Dr. Rausser goes on to say that this is the market where the injury has occurred. These two statements are contradictory. As discussed above, the relevant antitrust market is the market in which competition has been harmed. Since Dr. Rausser claims that the market for out-of-network reimbursements is where the injury has occurred, this should be a relevant antitrust market from his perspective.

63. When discussing the relevant markets at issue in my earlier report, I concluded that the markets for the sale of commercial health insurance are proper relevant markets in this case since the alleged reduction in out-of-network reimbursements is economically equivalent to a reduction in quality (i.e., a reduction in benefits).[60] In contrast, in ¶ 32 of his new declaration, Dr. Rausser argues that these are not proper relevant markets since the injury is not caused by an "elevated premium." However, as discussed above, the exercise of market power is typically defined as either an increase in price or a decrease in quality. The reduction in benefits, of course, is equivalent to a decrease in quality. Similarly, in ¶ 41 of his new declaration, Dr. Rausser claims that "patients often ***do*** have some choice when seeking coverage, but they ***don't*** have the ability to change coverage when they are seeking treatment." Of course, as I explained in my earlier report, this assertion is wrong with respect to out-of-network services,

[60] See, e.g., McCarthy 11-10-10 Report, ¶ 26.

since the patients always had the option of switching to in-network providers if they thought the cost of the out-of-network provider was too high.[61] They could also choose a lower-priced out-of-network provider. In addition, CIGNA, Aetna, and United would provide the patients with information that would allow them to determine how much the out-of-network services would cost.[62]

64. In ¶ 36 of his new declaration, Dr. Rausser says that United, Aetna, CIGNA of Tennessee, Highmark, and Blue Cross / Blue Shield of Tennessee supplied 52 percent of the charge data to Ingenix in 2004. He then goes on to say that "there is a small number of very large health insurers, and these are the only companies that would have to be included in the active conspiracy." Presumably, Dr. Rausser believes that the health insurers named in the first sentence are the only ones who would have had to be involved in the alleged conspiracy in 2004. However, if that is the case, these large insurers are different than the five that he highlighted in his merits report (i.e., Aetna, WellPoint, CIGNA, Health Net, and United). They are also different than the five large insurers that Dr. Foreman mentions in ¶ 203 of his new declaration (i.e., CIGNA, Aetna, Wellpoint, Humana, and United). Moreover, even though Dr. Rausser tries to clarify this issue in ¶ 39 of his new declaration by saying that "the active participants in the alleged conspiracy are all major health insurance companies," it is unclear how he defines major health insurance companies. Is it just the large national companies? Does it include HealthNet (who has been sued in a similar litigation), Coventry, and Kaiser? Does it include all of the Blue plans (such as Blue Cross / Blue Shield of Tennessee)? Does it include the large third party administrators? Again, the number and identity of the alleged conspirators is unknown and appears to be a moving target. Further, there is no basis offered for why any particular number of alleged conspirators can form an effective conspiracy.

65. In ¶ 43 of his new declaration, Dr. Rausser argues that "the use of alternative methodologies does not threaten the conspiracy because it ***generally*** produces reimbursements that are much lower than those resulting from the Ingenix products" (emphasis added). However, this conclusion would only be true if (1) the alternative methodologies always

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[61] McCarthy 11-10-10 Report, ¶ 120.

[62] *Ibid.*

produced lower reimbursements and (2) the alleged conspirators could monitor them to make sure that was the case. Since even Dr. Rausser appears to acknowledge that the alternative methodologies may not always produce lower reimbursements, and since the Coordination of Benefits process does not always allow the secondary insurer to determine what method the primary insurer has used to determine the allowed amount, these two conditions are not met. Moreover, even though Dr. Rausser claims in ¶ 47 of his new declaration that "it would be a comparatively simple matter to determine whether Ingenix UCRs were [being] used by comparing the allowed amount to the Ingenix schedule," this would not be the case since the insurers did not always use the Ingenix 80th percentile to come up with the allowed amount. Therefore, the alleged conspirators would not have wanted to join the alleged conspiracy in the first place since they did not have the ability to make sure that all of the alleged conspirators would live up to the terms of the conspiratorial agreement.

66. In ¶ 56 of his new declaration, Dr. Rausser asserts that all of the alleged conspirators benefited from participating in the alleged conspiracy because their profits were higher than they otherwise would have been. He makes this point in rebuttal to my observation that some of the alleged conspirators earned large losses during the period of the alleged conspiracy. Of course, an alleged conspiracy that just results in some of the alleged conspirators experiencing smaller losses than they would have experienced is not much of a conspiracy, particularly over the long period this supposed conspiracy has allegedly been in existence. In addition, Dr. Rausser's assertion is inconsistent with his other assertion that the alleged conspirators could have individually gained more members by paying higher out-of-network reimbursements and advertising the fact. If the alleged conspirators who earned the losses could have gained more members by paying higher reimbursements, they would have done so. This might have allowed them to avoid their losses. Given that these alleged conspirators did not try to increase their membership by paying higher reimbursements and advertising the fact, this indicates that they were already paying "competitive" out-of-network reimbursements and saw no economic advantage to increasing them. As such, this further supports the conclusion that the alleged conspiracy did not take place.

67. Dr. Rausser claims in ¶¶ 57-58 of his new declaration that I have taken too simplistic a view when concluding that the providers have not been harmed by the alleged

conspiracy since they could have always balanced billed the patients. In particular, he suggests that the amount of bad debt that providers experience has been increasing and that the increase is due, in part, to not being able to collect the unpaid amounts for out-of-network services, though he offers no evidence of the increases in provider bad debt or the connection to the possible sources of increasing bad debt. There are several points to make about this. First, assuming that the bad debt percentage has been increasing over time, the number of patients that a provider typically treats on an in-network basis is generally much larger than the number that the provider treats on an out-of-network basis.[63] Thus, it is not clear how much (if any) of the increase in the bad debt percentage is due to the out-of-network patients. This is especially true since patients in a recession would have a much greater incentive to receive their treatments from in-network providers since the cost of using out-of-network providers is usually greater. Second, every provider experiences a certain amount of bad debt. To take the position that the providers have suffered antitrust injury because they did not get paid their full list price fails to understand how many physicians set their list prices. They set list prices so that they do not leave money on the table from those insurers that pay full charges or nearly so. Thus, discounts are very common. Such discounts are not the same as "bad debt." It is also why many providers do not collect the balance bill—they realize that some will be written off but want to see how much the insurer will pay first. Even in plaintiffs' but-for world, there would still be a certain amount of such "bad debt" associated with the out-of-network patients. Third, for the providers to have suffered antitrust injury would require showing that reimbursements have been reduced "market-wide." The fact that some providers are not getting paid by some out-of-network patients does not mean that there has been a systematic reduction in reimbursements to providers market-wide. As such, this would not represent antitrust injury.

Thomas R. McCarthy
October 26, 2011

[63] I am counting the traditional Medicare patients as in-network patients since the providers have to agree to accept the Medicare fee schedule if they treat them.

Exhibit 20

ORDER NO.: A10-113

STATE OF NEW JERSEY
DEPARTMENT OF BANKING AND INSURANCE

IN RE THE USE OF THE INGENIX MDR DATABASE FOR THE CALCULATION OF USUAL, CUSTOMARY AND REASONABLE FEES PURSUANT TO N.J.A.C. 11:3-29.4(e)	))))	ORDER

This matter relates to the decision of the Appellate Division of the New Jersey Superior Court in In Re Adoption of N.J.A.C. 11:3-29 by the State of New Jersey, Department of Banking and Insurance, 410 N.J. Super. 6 (App. Div. 2009) (hereinafter "In Re Adoption of N.J.A.C. 11:3-29").

Background

Pursuant to N.J.S.A. 39-6A-4.6, the Commissioner of the Department of Banking and Insurance (the Department) is responsible for the promulgation of medical fee schedules to be used in the reimbursement of medical providers under the personal injury protection (PIP) coverages of automobile insurance policies. N.J.A.C. 11:3-29, Medical Fee Schedules: Automobile Insurance Personal Injury Protection and Motor Bus Medical Expense Insurance Coverage ("PIP Fee Schedule Rule"), and its Exhibits, establish the medical fee schedules and associated rule provisions for the payment of the PIP benefits by automobile insurers and motor bus insurers. N.J.A.C. 11:3-29.4(e) generally provides that an insurer's limit of liability for any medical expense benefit for any service or equipment not set forth in the PIP fee schedules shall not exceed "the usual, customary and reasonable fee." As a part of the rulemaking originally

effective on August 29, 2007, the Department also adopted N.J.A.C. 11:3-29.4(e)1, which describes how insurers should determine the "usual, customary and reasonable fee" (UCR) for the services that are not on the fee schedules. It states,

> [f]or the purposes of this subchapter, determination of the usual, reasonable and customary fee means that the provider submits to the insurer his or her usual and customary fee. The insurer determines the reasonableness of the provider's fee by comparison of its experience with that provider and with other providers in the region. The insurer may use national databases of fees, such as those published by Ingenix (www.ingenixonline.com) or Wasserman (http://www.medfees.com/) for example, to determine the reasonableness of fees for the provider's geographic region or zip code. [N.J.A.C. 11:3-29.4(e)1].

A coalition of groups representing medical providers filed a challenge in the Appellate Division to the 2007 adoption of the amendments to the PIP Fee Schedule rules. As part of the challenge to the adoption, the appellants objected to the use of Ingenix databases for determining the reasonableness of fees for services that are not on the fee schedule as referenced in N.J.A.C. 11:3-29.4(e)1. As noted above, on August 10, 2009, the Appellate Division issued its decision in this challenge to the PIP rules, and specifically affirmed the vast majority of the Department's 2007 adoption of the amendments to the PIP fee schedule rules. In Re Adoption of N.J.A.C. 11:3-29, supra, 410 N.J. Super. 6. In its decision, the Appellate Division found that the Department had conducted a detailed review of multiple sources of fee data and based the physicians' fee schedule on "databases (that) were reliable sources of information." Id. at 34. The Appellate Division also found that the Department made "considered and informed judgments" in developing the rules and fee schedules, and that the fee schedules reflect amounts actually paid to providers by auto insurers (as opposed to amounts paid by other payers such as

health carriers). Id. at 36-37. The decision also reaffirmed that the Department's use of paid fees to develop the physicians' fee schedule was proper. Id. at 38-39.

The Appellate Division, however, enjoined the use of the Ingenix database authorized by N.J.A.C. 11:3-29.4(e)1 for the insurers' evaluation of fees that are not on the fee schedule, pending further review by the Department. Id. at 40-41. The Appellate Division referenced physician concerns that the Ingenix database might be improperly skewed toward the reduction of fee reimbursements, and the court ultimately "allow[ed] the Department to apply its expertise in assessing the bona fides of the questioned database" while allowing implementation of the remaining rules. Id. at 41.

This Order represents the analysis required by the Appellate Division prior to permitting use of any Ingenix database by an insurer to assess the reasonableness of a fee under N.J.A.C. 11:3-29.4(e)1. For the reasons set forth herein, the Department has determined that use of the Ingenix database in the PIP UCR context is reasonable and such use is therefore permissible.

Analysis

The Department sought to assess the bona fides of the Ingenix database by comparing it to other established and independently created databases to determine if it produced results that deviated from the other databases in ways that demonstrated a flawed methodology or an intentional suppression of fee amounts. For this comparison, the Department chose databases produced by Wasserman, the New York Workers' Compensation system, and Medicare. The Department chose Wasserman because its use in determining UCR was neither enjoined by the Appellate Division nor objected to by the appellants, despite its equal status with Ingenix in the PIP rule, and because the Medical Society of New Jersey recommended its use to the Department

during the development of the PIP fee schedule rules and provided an expert analysis concluding that Wasserman produced the most accurate UCR data available. The Department chose the New York Workers' Compensation schedule because it was comprehensive, independently developed and the product of a neighboring Department of Insurance that is known to this Department to have expertise in the development of fee schedules. The Department chose Medicare because it is the most comprehensive and widely used fee schedule database available, and because its underlying methodology is transparent and widely considered to be mathematically sound. On the Ingenix side of the comparison, the Department chose the MDR™ database because it is the Ingenix database primarily used by automobile insurers to determine UCR.

The Department's next step was to identify fees that were significant in dollar amount, yet not on the Physicians' Fee Schedule, and thus subject to ongoing UCR determinations. The Department used data from Consolidated Services Group (CSG), a PIP vendor for a number of insurers, to find the thirty-three highest-value (i.e., highest total reimbursement amount) Common Procedural Terminology (CPT) codes that met this standard. The Department then obtained the fees for those thirty-three codes from the following sources:

1) The May 2009 release of the Ingenix MDR™ database at the 75th percentile for geozip 070;[1]

2) The 2009 Wasserman Physician Fee Reference (PFR) at the 75th percentile for zip code 07020;

[1] 1. According to the definition of "geozip" on the Ingenix website, geozips are "groupings of one or more 3-digit zip codes that describe geographic areas defined primarily by charge data similarity and geographic proximity." Geozip 070 is comprised of all USPS zip codes beginning in 070.

3) The July 2008 edition of the New York Workers' Compensation Fee Schedule for Region III (Westchester County, NY). Although distributed by Ingenix, the New York Workers' Compensation Fee Schedule is compiled by the New York Department of Insurance; and

4) The 2009 Medicare Physicians' Fee Schedule.

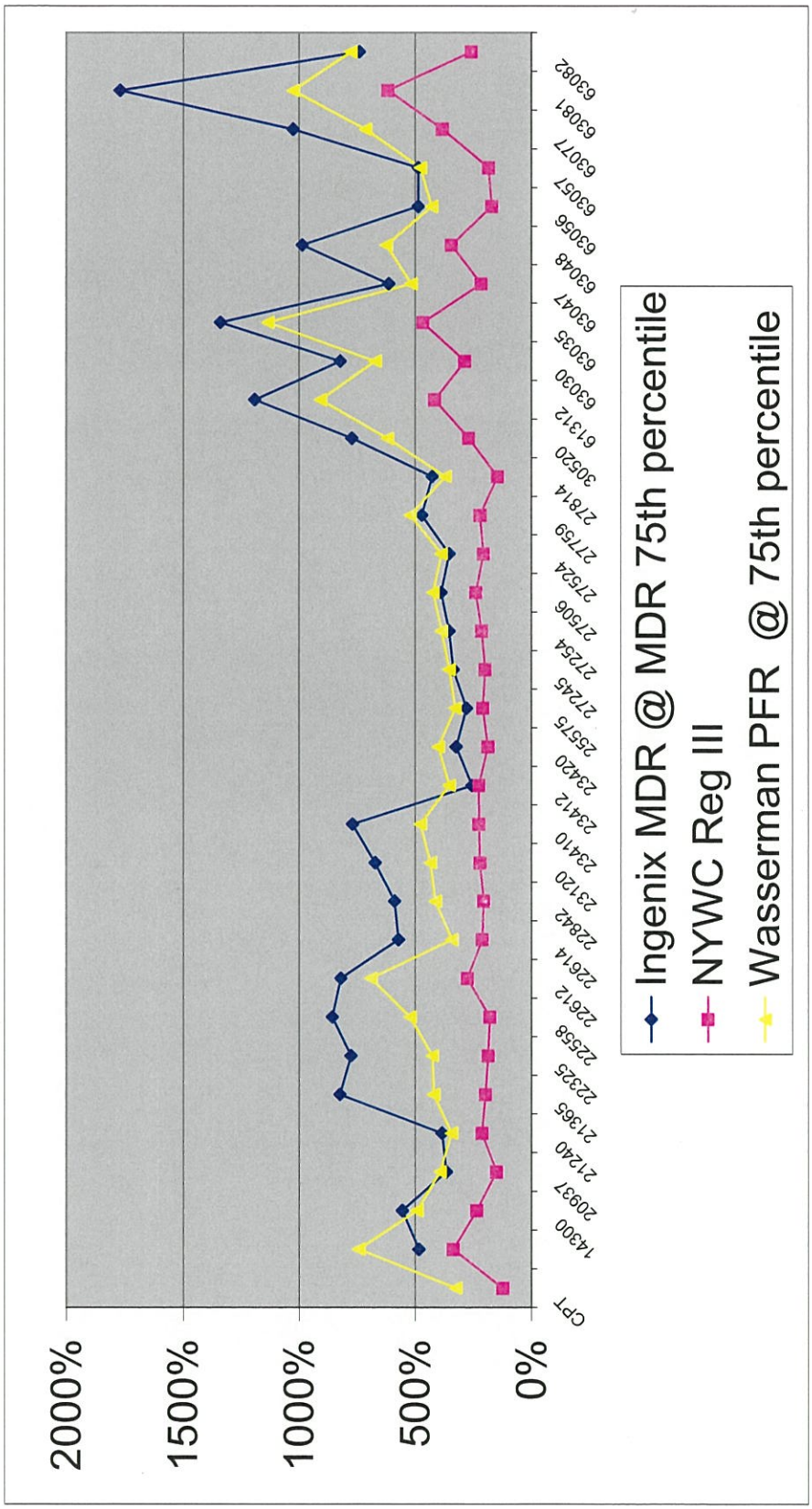
The Department then expressed the fees from the first three sources described above as a percentage of the 2009 Medicare Physicians' Fee Schedule to determine how they compared with one another when set against a common standard. The results of this comparison are displayed as a line graph found in Exhibit 1. The graph shows the Ingenix MDR™ fees, the Wasserman fees and the NY Workers' Compensation Fees to be similar in relative value to the Medicare fees. In other words, the actual output of Ingenix's system is a fee database that appears to consistently track the databases of other independent purveyors of fee databases, without anomalies suggestive of a flawed or arbitrary methodology. The results indicated a particularly strong mathematical correlation between the Ingenix and Wasserman fees for these codes, and this further supports the conclusion that Ingenix is producing legitimate fee data in the database used by the Department. Finally, and importantly, the graph shows that the Ingenix database often produces fees that are higher than those produced by the independent purveyor Wasserman, which maintains a database that the Medical Society of New Jersey has determined to be most accurate. These results appear to the Department to strongly support the conclusion that Ingenix fees are based on a reasonable methodology and not arbitrarily suppressed. Based on the analysis above, the Department believes that the bona fides of the Ingenix MDR™ database have been adequately demonstrated.

Conclusion

Based on the foregoing, it is on this 26th day of August, 2010, ORDERED that the Ingenix MDR™ database can be used by automobile and motor bus insurers to determine the reasonableness of fees billed for services that are not on the PIP Fee Schedule.

Thomas B. Considine
Commissioner

INOORD\O Ingenix UCR plh.doc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63047
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Ingenix MDR @ MDR 75th percentile
NYWC Reg III
Wasserman PFR @ 75th percentile

Exhibit 21

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

RENEE MCCOY, individually and on behalf of all others similarly situated,

Plaintiff,

vs.

HEALTH NET, INC., HEALTH NET OF THE Northeast, INC., and HEALTH NET OF NEW JERSEY, INC.,)

Defendants.

Civil Action No. 2:03-cv-1801(FSH)(PS)

CONFIDENTIAL

EXAMINATION BEFORE TRIAL OF

DEBORAH JUSTO

ZEV AND LINDA WACHTEL, individually and on behalf of their children, TORY, JESSE and BRETT WACHTEL, and on behalf of all others similarly situated,

Plaintiffs,

vs.

GUARDIAN LIFE INSURANCE COMPANY OF AMERICA, HEALTH NET, INC., and HEALTH NET OF NEW JERSEY, INC.,

Defendants.

REPORTING SERVICES ARRANGED THROUGH:
VERITEXT/NEW JERSEY REPORTING COMPANY, L.L.C.
Kabot Battaglia & Hammer - Suburban Shorthand
Waga & Spinelli - Arthur J. Frannicola CSR
25B Vreeland Road, Suite 301
Florham Park, New Jersey 07932
Tel: (973) 410-4040 Fax: (973) 410-1313

Transcript of the Examination Before Trial of DEBORAH JUSTO in regard to the above entitled

Ingenix said it was okay for Aetna to accept whatever Aetna chose to accept, is any of that in writing, whether e-mail or letter or otherwise?

MS. O'REILLY: Objection. Objection to form.

MS. TAYLOR: Objection.

A. I don't recall.

Q. Have you ever seen a data use licensing agreement from Ingenix?

A. Yes.

Q. Are you aware that the data use licensing agreement requires a contributor to submit all of its available data?

MS. O'REILLY: Objection to form.

MS. TAYLOR: Objection.

A. I would have to look at the language. I have looked it over, but I don't know it verbatim.

Q. Are you aware of any analysis by Aetna regarding how many charges either as an absolute number or as a percentage of its total that it is not profiling because of the profiling rules in place?

MS. O'REILLY: Objection.

A. Can you tell me what the question is, please.

Q. Sure. Are you aware of any analysis by Aetna regarding how many charges, either as an absolute number or as a percentage of the total, that Aetna is

not sending to Ingenix because of Aetna's profiling rules?

A. No.

Q. Okay. And I don't believe it was your testimony, but I just want to make sure I understood, that Ingenix has never asked Aetna to provide that information to Ingenix; correct?

A. I don't believe so.

Q. Okay.

MS. QUACKENBOS: Excuse me.

(A discussion is held off the record.)

Q. Ms. Justo, do you still have a copy of Plaintiffs' 1?

A. Yes.

Q. Could you please turn to the second page of that, which for the record is McCoy/Aetna-002.

Oh, by the way, just actually one question first about what we were covering before. And then we'll go on to this.

Did Ingenix ever audit Aetna's data contribution at any time from 1998 through December 31st, 2004?

A. Not that I'm aware of.

Q. Okay. Looking at McCoy/Aetna-002, there's a heading "Per TOLR ACAS Automated Profiling

Guidelines." Do you see that?

A. Yes, I do.

Q. The first line reads, "Charges that exceed prevailing will be reduced and not profiled with Action Codes 617 or 657." Do you see that?

A. Yes, I do.

Q. Do you have an understanding as to how Aetna

has applied that rule at any time between 1998 and December 31st, 2004?

A. I believe that to just be a terminology error in a manual. That is not what is happening in the system.

Q. And have you looked -- What is the basis for your understanding that that is a terminology error, as you put it?

A. We check, I checked with someone involved with the systems and they looked at claim activity and told me that that is not what is happening.

Q. And who is the person that you say you checked with?

A. Her name is Anna Chavez, C-h-a-v-e-z.

Q. What is it that made you go check with Anna Chavez about the automated profiling guidelines appearing on McCoy/Aetna-002?

A. That it's not been our practice to not

profile charges that exceed prevailing. And so I was concerned. I wanted to make sure that that wasn't what was happening in the system.

Q. What was your understanding of Aetna's practice based on?

MS. O'REILLY: Objection to the form.

A. We would not want to do that. That --

Q. Okay. I don't think you are understanding my question. If I understood your testimony correctly, you are saying that something caused you to look at this rule and say to yourself, "Oh, I don't think

that's exactly how we are applying it. Let me go back to Anna Chavez about that."

A. Yes.

Q. Okay. First of all, when did you say to yourself, "I don't think this rule accurately reflects what Aetna is actually doing"?

A. I saw it in preparation for this, when we were collecting documents.

Q. And when, when if you can supply a date, when did that occur?

MS. O'REILLY: Objection to the form.

A. I don't recall the date.

Q. Within the last two weeks?

MS. O'REILLY: The date of the collection of

the documents or the conversation with Chavez? That was the nature of my objection.

Q. When was it that you said to yourself, "Oh, I'm reading Rule 1 here and I don't think this is accurate, let me go figure out whether this is accurate or not"? When did that occur to you?

A. It's been within the last month.

Q. Okay. And why did you decide that Anna Chavez would be the right person for you to ask?

A. She's assisted me with system questions in the past.

Q. Is she an IT person?

A. I believe so.

Q. Is she the person responsible for putting in or maintaining automated profiling guidelines?

A. This document? Or system -- she is familiar

Exhibit 22

22. Trial Transcript of Sharon Chilcott_04.14.05.TXT

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

RENEE MCCOY, individually and on behalf of all others similarly situated,

Plaintiff,

vs.

HEALTH NET, INC., HEALTH NET OF THE Northeast, INC., and HEALTH NET OF NEW JERSEY, INC.,)

Defendants.

Civil Action No. 2:03-cv-1801(FSH)(PS)

CONFIDENTIAL

EXAMINATION BEFORE TRIAL OF

SHARON CHILCOTT

ZEV AND LINDA WACHTEL, individually and on behalf of their children, TORY, JESSE and BRETT WACHTEL, and on behalf of all others similarly situated,

Plaintiffs,

vs.

GUARDIAN LIFE INSURANCE COMPANY OF AMERICA, HEALTH NET, INC., and HEALTH NET OF NEW JERSEY, INC.,

Defendants.

REPORTING SERVICES ARRANGED THROUGH:

Q. You may answer.

A. I am able to testify to the automated profiling guidelines without seeing the specs or the requirements, I would say for the majority of these guidelines under this heading. Without seeing the specs or the requirements.

Q. Okay. And what does "the majority of these guidelines" mean?

A. Three, four, five and six.

Q. So am I correct in saying that right now sitting here today, you do not believe you are able to testify about Rules 1 and 2 without seeing the business requirements; yes or no?

MS. O'REILLY: Objection to the form of that question. It depends what you are going to ask her.

THE WITNESS: Right.

MS. O'REILLY: And you haven't asked the right foundational questions and I think that's where you are hung up.

Q. Can you answer my question?

MS. QUACKENBOS: And again, if you continue to

persist in speaking objections, I will call the Court.

MS. O'REILLY: Well, you are not giving her enough information to --

MS. QUACKENBOS: You know what? That's the last one.

MS. O'REILLY: Go ahead.

MS. QUACKENBOS: That's the last time I'm going to tell you.

MS. O'REILLY: Ask her the questions, go ahead.

MS. QUACKENBOS: I asked her the question.

MS. O'REILLY: Objection to the form.

A. Okay. Could you repeat that question.

Q. Are you able to testify about Rules 1 and 2 that appear on McCoy/Aetna002 today without seeing the business requirement documents that were not provided to plaintiffs; yes or no?

MS. O'REILLY: Objection to the form.

A. That -- I don't think that I can answer that in a yes or no.

Q. Why not?

A. Because there's more to that situation than

what you are asking.

Q. So why don't you tell me everything you know about Rules 1 and 2 on this Page 002.

A. Everything that I know about 1 and 2 on this page was -- is that these two lines got in here from someone either omitting or misunderstanding some of the profiling rules.

"Charges that exceed prevailing fee but are within plan prevailing fee liberations will be accepted but not profiled" is a mistake.

Q. And what's the basis for your statement that this is a mistake?

A. Because we profile all charges, regardless of a prevailing fee limitation.

Q. And what is the basis for your testimony that, despite this document that is still on TOLR, that appears under a heading called Automated Profiling Guidelines, what is the basis for your testimony that despite that, Aetna does profile charges that exceed prevailing fees?

A. Because that's what the system does. I mean, we profile all charges, with the exception of those

that are either manually outlined here or that have been looked over and revised as -- or as stated in 3, 4, 5 and 6. I mean I know that 3, 4, 5 and 6 operate as they are stated. I know that Number 1 is not occurring.

Q. And how -- I am asking you specifically how you know that one is not occurring? What is the specific basis for that testimony?

A. Number 1 is not occurring because some people did some research to find out this was not occurring.

Q. And who were the people who did the research?

A. They were some -- part of our P&E folks, our area.

Q. What are their names?

A. I believe Anna Chavez.

Q. And when did Ms. Chavez perform this research?

A. I believe they did that at the beginning part of the week or the end of last week. I'm not absolutely positive of the date.

Q. And did her research take a written format?

A. I do not know that.

Q. Did you speak with Ms. Chavez about her research?

A. I did not speak with her directly.

Q. Who did you speak to about Ms. Chavez's research?

A. Miss Justo.

Q. And was Ms. Justo involved in this research?

A. I don't know to what extent Ms. Justo was involved in the research.

Q. And what did Ms. Justo specifically tell you about Rules 1 and 2 on McCoy/Aetna002?

A. She specifically indicated that she had spoken with Ms. Chavez and that they went back through to look at all of the systems to see if Number 1 was being done.

Q. And what did Ms. Justo tell you about --

A. She indicated that the system --

Q. You have to let me finish, please.

A. I'm sorry. I thought you were.

Q. No. I was in the middle of the sentence.

A. I'm sorry.

Q. What did Miss Justo tell you about Ms.

Exhibit 23

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY
MDL NO. 220
MASTER FILE NO. 2-07-CV-3541

IN RE: AETNA UCR LITIGATION

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* * CONFIDENTIAL * *

TRANSCRIPT OF

DEPOSITION OF CARMEN M. KAVALI, M.D.

TRANSCRIPT of the stenographic notes of the proceedings in the above-entitled matter, as taken by and before JUDITH L. LEITZ MORAN, a Registered Professional Reporter, a Certified Court Reporter, and Notary Public, held at the Law Offices of Doffermyre, Shields, Canfield & Knowles, L.L.C., 1355 Peachtree Street, Suite 1600, Atlanta, Georgia, on Friday, February 12, 2010, commencing at 9:07 a.m.

analysis as it's become obvious throughout this discussion of the practice. I charge what I believe is fair.

Q Do you publish your submitted charges anywhere on your website or in your office?

A On my website my laser hair removal fees are published, but that's it.

Q Do you publish your submitted charges for insured procedures?

A No.

Q Do you tell patients what your submitted charges are for your insured procedures before you give them the surgery?

A I don't know if my staff does or not. I'm in general not asked that question by patients.

Q You're not asked what the charge will be for the procedure?

A No. It's -- it's pretty clear that I'm there to do the clinical work and my staff has the discussion in general regarding fees.

Q Are you aware of any discussions that your staff has had with a patient about what the submitted charge is for an insured procedure?

A Not that I'm aware of.

Q And have you given your staff any guidelines about how to answer those types of questions?

A No.

Q Have you ever told a patient before surgery that the patient will not be responsible for the full submitted charge?

A Not using those words. I tell them as much as possible we try to match their in-network out-of-pocket expenses once their out-of-network deductible is met.

Q So by telling patients that will you try to match their in-network expenses, does that mean that you won't charge them the full submitted charge?

A I don't balance bill my patients.

Q You never balance bill your patients?

A I won't say never. But in general I don't balance bill my patients.

MS. FESSENDEN: Geoff, do you have a lunch plan?

MR. NEUGEBAUER: No.

MR. SIGLER: The answer is clearly no. Give me a few minutes.

MS. FESSENDEN: That's fine, but let's not go too much longer and then we'll -- I can give you some

places to go that are close.

MR. SIGLER: Great.

BY MR. SIGLER:

Q Why don't you balance bill your patients?

A For several reasons. First, I expect that the insurer is going to reimburse me a fair rate, which is what I bill. And then I shouldn't have to ask the patient to pay additional.

Second is that I'm not a collection agency and I don't wish to create an adversarial relationship with my patients.

Q Is there any other reason?

A Those are the main reasons I can think of.

Q Is it part of your effort to compete with in-network physicians on price?

A Yes.

Q And you said that part of the reason you don't balance bill is because you expect to receive a fair rate from the insurers?

A Yes.

Q And before joining as a plaintiff in this lawsuit, did you believe you were receiving a fair rate from your insurers?

A I did not.